BEFORE THE

Interstate Commerce Commission

I. & S. DOCKET 555

WESTERN ADVANCE RATE CASE.

IN RE ADVANCE IN RATES IN WESTERN CLASSIFICATION TERRITORY.

BRIEF AND ARGUMENT

As To

FINANCIAL CONDITION OF RAILROADS

ON BEHALF OF

THE STATE RAILROAD AND PUBLIC SERVICE COMMISSIONS OF MINNESOTA, NEBRASKA, KANSAS, SOUTH DAKOTA, NORTH DAKOTA, OKLAHOMA, LOUISIANA, IOWA, ARIZONA, ARKANSAS, COLORADO, IDAHO, MONTANA, NEVADA, NEW MEXICO AND TRAFFIC BUREAU OF UTAH.

CLIFFORD THORNE,
W. M. BARROW,
H. T. CLARKE, JR.,
P. W. DOUGHERTY,
A. J. EDGERTON,
C. E. ELMQUIST,
A. E. HELM,
J. H. HENDERSON,
G. A. HENSHAW,
F. A. JONES,
WILLIS E. REED,
W. H. STUTSMAN,
OLIVER E. SWEET.

TOPICAL INDEX.

PROPOSED FINDINGS.

I. That, in the Western District, freight rates are much higher, and operating ratios are much lower, than in any other territory.

II. That western railroads have adequate funds with which to maintain their properties.

III. That the respondent companies have failed to prove that their credit has become impaired, or that their securities are unattractive to investors, thereby rendering them unable to secure adequate funds for betterments and improvements. On the contrary, the record shows that their new construction during recent years, has surpassed anything in their former history.

IV. That the respondents have failed to sustain the burden of proof, that their revenues constitute an inadequate return upon the fair value of their properties.

PRELIMINARY STATEMENT.
THE ISSUES.
DISCUSSION OF EVIDENCE.
ARGUMENT.

PRELIMINARY STATEMENT.

Are western railroads entitled to more revenue through advanced freight rates, is the issue presented in this case.

Secondary to this main proposition is the question whether the carriers are entitled to the particular advances which they have proposed at this time.

Railroading and agriculture are the two greatest industries in the United States. In this case, the railroad industry seeks to levy an additional tax upon agriculture.

We have witnessed with pride the marvelous growth of western railroads. Those who have had the genius and foresight to promote these enterprises, have generally had the genius, likewise, to amass fortunes while this development has been in progress.

Railroads have played an important role in the industrial development of the west. Likewise, the farmers have contributed to the growth and prosperity of these carriers. Neither group can live without the other. Both need money. One interest must consider the needs and the rights of the other.

The Eastern case was described by you, in the decision, "as, in some sense, a controversy between the consuming

public which pays the rates, and the investor who furnishes the facilities for moving the freight." *(Five Per Cent Rate Case,* 31 I. C. C., 351, 359.)

The present proceeding is rather between the producer and the railroad, than the consumer and the railroad. It is very commonly stated that the consumer pays the freight. Frequently, however, the producer pays an advance, especially on the raw product, while the consumer generally pays an advance on the finished article. It was quite conclusively established in this proceeding that the producers of live stock and grain are the parties who will pay the proposed advances on those products. On packing house products and broom corn, it seemed the manufacturer was the one vitally affected, and who raised objection.

The railroads, and the territory involved, are substantially the same as those considered in the two cases decided February 22, 1911, entitled, the *Western Advanced Rate Case,* 20 I. C. C., 307, and the *Railroad Commission of Texas v. A., T. & St. Fe, et al.,* 20 I. C. C., 463. For convenience we shall refer to the latter as the Southwestern Case of 1910. The territory corresponds closely to Western Trunk Line, Trans-Missouri, and Southwestern Committee Territories.

May 21, 1914, a meeting was held in Chicago, by a group of men representing the western railroads. There it was decided to undertake to increase the freight tax on western shippers. A comprehensive program of action was agreed upon. The particular group of rates involved in this proceeding is only one part of a general movement to increase their revenues. Various methods were unanimously agreed upon, including: specific advances on special commodities, the elimination of various privileges, including stoppage in transit privilege, the concentration privilege on dairy food products, and a wholesale advance in passenger rates.

The authorized representatives of sixteen states decided to ask that all be consolidated in one case, in which the adequacy of the entire revenues of each of these western railroads should be thoroughly investigated. The Commission joined a large number of the cases into one proceeding, but separated the passenger rate case, and others, from this part of the freight case.

The Commission will not make an exhaustive investigation of the financial condition of these carriers in each one of these cases. That forces the issue at this time, for these western railroads.

The railroads are relying chiefly upon what they call property investment, which is the book value of their property, as the basis for their claims; a basis which this Commission repudiated seven years ago, saying that no accountant of any standing would accept this figure for a moment, as any evidence whatever of original cost, or present value.

There are certain fundamental differences in conditions between the west and the east, of a controlling character.

Western rates are already more than 25% higher than eastern rates. The western railroads make no claim because of the European war, and its effect on wages, supplies, or credit.

The railroads have held out to the public the claim that they were unable to buy the necessary supplies for maintaining their properties; and that, consequently, business generally was suffering because of this condition. During this case, however, the western railroads have specifically abandoned that issue by statement of record made by the leading counsel for the carriers.

A striking contrast between the Eastern and Western cases is that in the Eastern the executive officials of strong, representative railroads, handling over one-half the traffic in the whole territory, took the stand. In the

Western they selected the presidents of three of the weak railroads, to go on the stand to testify as to their financial needs. This course of action we believe is wrong. A weak line cannot be accepted as a standard or test for the reasonableness of rates.

There are weak sisters in all lines of industry. It is the successful that sets the pace for the rest of the world. The adoption of a different doctrine would be contrary to that condition which prevails in all other lines of business in the country. It would be setting a premium upon inefficiency.

Some would have us believe that because this Commission has granted general advances in one part of the United States, that it therefore must grant these advances proposed by the western railroads. It will be a strange situation when it develops that because one group of railroads serving one territory is entitled to an advance, therefore all other railroads in the United States are also entitled to an advance; because certain railroads need more money, therefore, all other railroads need more money. Let us pause and carefully weigh the meaning of such course of action. What would it indicate? Such argument furnishes interesting food for thought. Has it ever happened in the history of this Commission, that because reductions are granted in some cases, for some railroads, in some portions of the United States, that therefore, *ipso facto,* reductions have been granted on every other railroad, in every other part of the United States where people have asked for them? Strange will be the conditions when that day arrives. Regulation will have outlived its usefulness.

Every case must depend upon the circumstances and conditions surrounding the matters at stake. That is axiomatic. In 1910 you granted advances in the southwest and denied them in the East and the west. The courts may permit advances in Ohio, or West Virginia, or

North Dakota, and at the same time decline to advance rates in Minnesota and Missouri. The water works in Chicago, or the telephone lines in Indiana, may be entitled to advances; while those in California may not be entitled to increases. The level of rates, coupled with the density of traffic, produces different revenues. You are now dealing with approximately two-thirds of the American nation. There may be some portions of this territory where advances are justified, and other portions where they are not justified. We will present to you the facts as we find them.

THE ISSUES.

BURDEN OF PROOF.

The Act of Congress of June 18, 1910, places the burden of proof upon the carriers to show that any rate increased after January 1, 1910, or sought to be increased after the passage of said Act, is just and reasonable.

This Commission in the Western Advanced Rate Case of 1910 construed the law just the way it reads. There is no room for discussion. The burden of proof concerns not only that portion of the new rate which is the increase over the old rate, but the burden of proving the reasonableness of the advanced rate as an entirety rests upon the carrier.

This is the distinguishing characteristic between the English and American statutes upon this subject. This Commission in its unanimous opinion of 1910 clearly recognized that distinction we have referred to, in the following language:

> "It is urged with much force and an extensive citation of authority that the purpose of this provision was to limit the investigation of the Commission to the consideration of the necessity for 'the increase in the rate.' The purpose of Congress, it is said, was to regard all rates in effect on January 1, 1910, as the maxima, which could not be increased until it was shown that there was reason and necessity for the specific increase made. This would limit our investigation as to all rates increased since that time to the simple question: What additional expenses have attached to the movement of these articles which make proper an increase in the rate?

> "Such a construction of the statute is suggested by decisions of the English courts in interpreting the railway and canal act of 1894. We think, however, it is clear from the language of that statute, as well as its history, that the purpose of Congress differed from the purpose of Parliament. The English law was based on a legislative conclusion that existing rates were already sufficiently high and should not be increased excepting as transportation costs increased. Therefore the English commission was to deal with the increase itself in the rate and not with the increased rate. This distinction is fundamental in the consideration of the laws of the two Governments."

That places a heavy burden upon the carrier; but it is not a harder task than would otherwise fall upon the shipper; that has, in fact, rested upon the shipper in the great majority of cases in the past. The task of sustaining the burden in a great controversy like this must not be lightly disregarded. The carrier has the necessary facts, or the facilities to secure the same, in his possession. It is right that he should have the burden of proof; and until it is repealed, or the courts hold it unconstitutional, that must be accepted as law. The issues in the ordinary case before the Commission seldom rest upon the question of revenues as a whole. With only a few exceptions, practically all cases that have come before you have turned upon questions of discrimination. This is not true of many cases which have been determined by state commissions or municipalities, which have been appealed to the Supreme Court. In this case the carriers themselves have made the issue: inadequate revenues as a whole.

This action carries with it some far-reaching consequences. We must consider the adequacy of their present revenues; what their actual profits are (this carrying with it all the complicated questions of accounting and what constitutes profits); whether those profits are reasonable or not; what is a reasonable profit, and, back of that, what

is the best evidence of the value upon which they are entitled to such a profit. Many questions of law and public policy are raised.

Most of these questions have been discussed at length in the decisions of this Commission, and the Supreme Court.

THE OWNERS OF THE RAILROADS.

Who are the owners of our railroads? Can we deal with some colossal giant of finance who owns one or several railroads like the North Western, or Milwaukee? Of course that is an absurdity. We are forced to deal with facts as they are, not as somebody might dream them to exist. There are two classes of people who own the railroads: first, bondholders, and second, stockholders.

There are three distinct groups of interests involved in this controversy:

1. Holders of railroad bonds;

2. Holders of railroad stocks; and

3. The public, including producers, shippers and consumers.

The bondholders are chiefly interested in maintaining the integrity of railway properties, as going concerns. This Commission must assume that the rates on the funded debt of these companies are reasonable, for they are contractual. The man who agrees to loan his money at a certain per cent per annum cannot come in here and ask for more; his only interest here is to see that the ability of his company to meet its obligations is not jeopardized, or taken away. While none of the companies have claimed the usual interest on their bonds, yet it has been strongly urged that railway securities are no longer desirable investments. If this be true, then there is some ground for alarm on the part of the bondholder. He is primarily interested in seeing that the property is well

maintained, and that the credit of his company is not impaired. If a company's bonds are no longer salable, it necessarily is of importance to the man who has bought some of those bonds in the past, and now holds them. To the bondholder, the chief issues in this case concern the credit of the railway companies. If they can no longer sell their securities, needed improvements cannot be made, and the property will soon start on a downward course, thereby threatening his security.

The owners of railroad bonds are interested in securing a high rate of return on their investment, and stability in the security. So far as the first proposition is concerned, any advances that might be granted in the existing rates will not result in an increase of one-tenth of one per cent in the interest rate on outstanding bonds. No one has suggested an increase in the interest rate on the bonds outstanding in the hands of the poor widow, whose husband purchased them thirty years ago.

As to the future owners of bonds, one of the principal arguments urged in support of an advance in freight rates is, that it will serve to reduce the interest rate paid on that class of securities. Consequently, so far as any possible increase in the rate on bonds is concerned, that is not involved in this case to the slightest extent. The sole interest that the bondholder has in this case is the preservation of the stability of his security. If the record shows the carriers' property is deteriorating, or its credit is rapidly declining, that threatens the security of outstanding bonds, then the bondholder is vitally involved. We will give somewhat elaborate consideration to this phase of the case.

STOCKHOLDERS.

The second group of people that are concerned, and have transportation for sale, are the stockholders. The stockholder is the chief party in interest in this proceeding, and will reap the largest reward from any advance

granted. The railroad is the seller of transportation. The public is the purchaser of transportation. A clash of interests exists in any proposal to increase freight rates for the purpose of simply increasing the profits of the stockholders. There is not a particle of dishonesty upon either side of that question. It is the same old conflict between the purchaser and the seller, that exists in the barter and sale of cabbages, land, buildings and jack-knives. The only difference between this situation, and that prevailing in business generally, is that we have here, in one industry, several hundred thousand people, all compactly organized under one head—Mr. C. C. Wright. Competition is a forgotten myth of former days. The Sherman Anti-Trust Law has long since been dead, and buried, so far as our railroads are concerned. It is this fact which exists in no other industry, that compels the exhaustive, searching investigation that should be given in a proceeding of this character.

The stockholder is concerned about both the maintenance and the credit of his company. The ability to borrow money, and to sell stocks and bonds, is necessary in order to keep abreast of the times, to hold business, and to maintain the present earning power of the property. Another issue, however, is of equal importance to the stockholder. He is not so well protected as the bondholder; and, on the other hand, there is no contractual limit, ordinarily, on the maximum return upon his investment. Naturally he wants to earn as much as he can. The real conflict in this case is between the public and the stockholder.

On many matters, the interests of the railway companies and the public are in common. On the chief issues in this case, however, the interests of the stockholder, and the public, are diametrically opposed to each other. The railroads are the sellers of transportation, we are the purchasers. They want to get as much as they can within

reasonable bounds, and we want to secure their services as cheaply as we can, without doing them an injustice, or hindering their further growth and development.

The carriers urge that increased expenses have reduced the rate of return to such an extent as to injure their credit, so that they cannot secure funds necessary for improvements and betterments to their properties.

A railroad company secures its funds in just two ways:

1. Through current earnings; and

2. Through issues of notes, stocks and bonds.

The railroad company is entitled to maintain its property out of current earnings; but it is not entitled to demand current earnings adequate to build permanent improvements. Such betterments must be built by the owner of the railroad and not by the public. You must not make the public build the railroad for somebody else, and then pay a return to that party on its value. This is a question of law and public policy that is at issue in this case.

The method by which a company secures these funds for improvements is through capital issues. We are, therefore, compelled to make an analysis of the capitalization; to consider the net corporate income, the funded debt, the relation of stock to debt, and all other essential phases of its capitalization.

It is proper and necessary for us to examine the property investment and the net operating income; but when a company says it cannot secure funds for certain purposes that are legitimate and necessary, and makes that its chief argument before this Commission and before this country, in support of its claim for money, it behooves us to see if that claim is true or is not true.

If a company claims its securities are no longer at-

tractive to investors, that is a serious charge; but we should not immediately undertake to find what makes those securities unattractive, and enter into a labyrinthal analysis of percentages of this and of that. Our first task should be to find out whether that claim is false or true.

The task of investigating the credit of these railroads is the first task in the case. It is not difficult to find out whether their securities are attractive or not.

When a leading banker of the West takes the stand, and says that the railroads have to pay 50 to 75% more than industrial companies, generally, have to pay to secure money, that proposition can be tested very conclusively.

It becomes necessary for us to face the situation clearly as it exists. It is folly for us to deliberately assume that a company's credit is weakened, just because that company claims it. If that is all that is desired of a regulating body of this character, it is folly to have any hearings whatever. Let the carriers say they need more money, and then give it to them.

The first task to perform is to see whether their credit is impaired, and to find out what the facts are.

Summarizing the various important phases of a proceeding of this character, we find the issues to center around the following propositions:

A. Are the railroads able to maintain their properties as they ought to be maintained?

B. Are railroad securities attractive to investors?

C. Are those who own our railroads receiving a just return, upon the reasonable fair value of the property entitled to such return?

DISCUSSION OF EVIDENCE.

We will here discuss such portions of the evidence as do not readily fall under the divisions we have made of the argument.

It was announced by the Commission, and agreed to by counsel, that the official files of the Commission containing the reports of the carriers to the Commission and to their stockholders may be referred to as part of the record in the case. (tr. 14790-14791.)

DIFFERENCES—EAST AND WEST.

FREIGHT RATES.

Freight rates in the west are much higher than they are in the east. This is evidenced by two exhibits. First, we call attention to the accompanying exhibit introduced by Witness Chambers:

(Chambers Exhibit 3)

COMPARISONS OF DISTRICTS AND GROUPS.
AVERAGE HAUL, REVENUE PER TON MILE AND DENSITY.

	1911		1912		1913		1914	
	Average Haul	Revenue Per Ton Mile Mills	Average Haul	Revenue Per Ton Mile Mills	Average Haul	Revenue Per Ton Mile Mills	Average Haul	Revenue Per Ton Mile Mills
Western District	191.57	9.39	195.63	9.00	196.14	8.84	191.76	8.92
Southern District	187.80	6.94	190.80	6.84	192.89	6.74	193.06	6.68
Eastern District	130.43	6.38	129.23	6.38	130.36	6.28	133.15	6.27
Official Classification Territory	132.92	6.81	132.27	6.80	134.13	6.68	134.98	6.64
Central Freight Assn. Territory	134.79	5.68	131.78	5.74	132.37	5.63	130.54	5.71
Northwestern Group	221.70	8.57	222.30	8.20	229.85	7.93	224.65	8.12
Western Trunk Line Territory	222.33	8.93	222.48	8.60	227.08	8.34	221.51	8.46
Southwestern Group	178.11	9.69	181.93	9.41	190.50	9.47	190.03	9.30
aNew York Central Lines		6.09		6.17		6.05		6.25
aBaltimore & Ohio System		5.89		5.91		5.74		5.79
aPennsylvania System		6.15		6.11		6.06		6.09

a—Figures taken from exhibits filed in Eastern Rate Advance Case.

Authority:—Statistical Reports of I. C. C. for years ended June 30, 1911 and 1912, and from Preliminary Abstracts of Statistics of Common Carriers of I. C. C. for years ended June 30, 1913 and 1914, except as noted—

Roads having operating revenues exceeding $1,000,000.

It will be noticed that the revenue per ton mile on freight traffic in the western district as a whole, also in the northwestern and southwestern territories, is from 20% to 60% higher than in Official or Central Freight Association, or southern territories, while the average haul in the western district as a whole, as well as in the northwestern and southwestern territories, is substantially longer than in the eastern or southern district. This fact, if other conditions were analogous, would justify lower revenues per ton mile in the west than in the east and south. The accuracy of the figures shown in this exhibit was not questioned by any party to the case.

For the year 1914, the average revenue per ton mile in Official Classification Territory was 6.64 mills, in Central Freight Association Territory 5.17 mills. In the western district as a whole it was 8.92 mills, or 34% higher than in Official Classification Territory, and 56% higher than in Central Freight Association Territory.

In the Northwestern Territory the average revenue per ton mile was 8.12 mills, or 22% higher than in Official Classification Territory, and 42% higher than in Central Freight Association Territory. In Southwestern Territory the average revenue per ton mile was 9.30 mills, which was 40% higher than in Official Classification Territory and 63% higher than in Central Freight Association Territory.

The second exhibit in support of the proposition we have stated is Kirkland No. 2. This exhibit is prepared along precisely the same lines as the Morris Exhibits introduced in the Eastern Case, which persuaded the Commission that the level of freight rates in C. F. A. Territory was lower than anywhere else in the country. This compilation prepared by Mr. Kirkland is much more thorough and exhaustive than Morris even attempted. It proves the situation just as effectively and conclusively as Morris' Exhibit, *only more so.* Further, it completely substantiates the showing made by the single sheet ex-

hibit presenting average revenues per ton mile in the given territories which we have described above.

It has been conclusively proven beyond a question of a doubt that the freight rates in this western territory are very much higher than in Official Territory or C. F. A. Territory—rates which the Commission has of late had occasion to pass upon.

OPERATING RATIOS, EAST AND WEST.

Different policies of maintenance and of new construction may produce different operating ratios at one and the same time, for different companies, that are absolutely equally prosperous.

Again, your operating ratio may increase, and your profits may increase at the same time. In other words, your expenses may increase at a much greater rate than your earnings; and yet your net earnings will increase at the same time.

A concrete example best proves this. Suppose you have a property earning $1,000 gross, with an operating expense of $500. Suppose there is an increase of 80% in your expense and only 50% in your gross. In that case your new gross will be $1,500, and your new expense $900, leaving a net of $600, instead of $500, which you had the previous year. In this case your operating ratio the first year was 50%, and the second 60%. But your net revenues increased 20% in spite of an increase of 10 points in your operating ratio.

The real test is not what is the ratio of expenses to earnings; but what is the ratio of your true net to the value of that property upon which you are entitled to earn a return.

However, our friends, the railroads, place especial reliance upon operating ratios. For their benefit, we take pleasure in showing a comparison of operating ratios on

the eastern railroads with the operating ratios on western railroads.

COMPARISON OF OPERATING RATIOS—
WESTERN WITH EASTERN TERRITORY.

WESTERN LINES	1914	1914	EASTERN LINES
Northwestern Group:			Trunk Line Roads:
C., B. & Q.	67.01	74.90	Penn. R. R.
C., M. & St. P.	66.82	76.06	N. Y. C. & H. R.
C. & N. W.	70.99	73.92	B. & O.
G. N.	61.66	75.20	Penn. Co.
M., St. P. & S. S. M.	65.83	72.83	N. Y., N. H. & H.
C., St. P., M. & O.	70.21	76.52	L. S. & M. S.
U. P.	57.75	80.77	B. & M.
N. P.	60.50	70.85	Erie
C. G. W.	75.95	82.32	N. Y. C. & St. L.
M. & St. L.	71.63		
Representative Lines in Southwestern Group:			
A., T. & S. F.	64.33		Coal Carrying Roads:
So. Pac.	59.75		
St. L., I. M. & S.	64.35	69.40	Leh. Val.
D. & R. G.	69.14	61.85	P. & L. E.
C., R. I. & P.	74.77	64.97	C. R. R. of N. J.
St. L. & S. F.	73.19	66.30	D. & H.
Texas & Pac.	76.33	67.47	P. & R.
M., K. & T.	72.09	68.29	B. & L. E.
Mo. Pac.	81.80	68.42	Hocking Valley
		64.34	D. L. & W.
			C. F. A. Lines:
		89.03	C. C. C. & St. L.
		78.87	P. C. C. & St. L.
		74.66	C. I. & L.
		78.56	Vandalia
		83.43	C. & E. I.
		82.32	L. E. & W.
		79.91	G. R. & I.
		86.63	C. I. & S.
		81.29	Wabash
N. W. Group	65.49	75.96	35 Systems, Eastern Case
W. T. L. Group	67.15	84.48	C. F. A.—Group III Eastern Case
S. W. Group	71.50	80.23	C. F. A.—Group I Eastern Case

Authority: I. C. C. Preliminary Abstract of Statistics of Common Carriers for the year ended June 30, 1914.

The foregoing table makes use of the ordinary operating ratio figure, with which we are all acquainted. Mr. Wettling produces a new operating ratio by adding rents,

taxes, etc. He does this on the alleged ground of making the figures comparable with previous years. But it will be noticed that, at the same time he fails to make a corresponding adjustment of the depreciation item prior to 1908, as Mr. Sturgis was fair enough to do in 1910.

We will make those readjustments in our previous table, which Mr. Wettling did, placing the eastern and western lines on the same basis. This produces the following results:

COMPARISON OF OPERATING RATIOS—

WESTERN WITH EASTERN TERRITORY.

WESTERN LINES	1914	1914	EASTERN LINES
Northwestern Group:			Trunk Line Roads:
C., B. & Q...........	72.90	80.88	Penn. R. R.
C., M. & St. P........	71.87	82.12	N. Y. C. & H. R.
C. & N. W...........	77.45	79.66	B. & O.
G. N.	68.65	81.64	Penn. Co.
M., St. P. & S. S. M..	70.18	81.25	N. Y., N. H. & H.
C., St. P., M. & O...	78.07	81.85	L. S. & M. S.
U. P.	63.78	87.95	B. & M.
N. P.	66.22	75.47	Erie
M. & St. L...........	79.63	89.81	N. Y. C. & St. L.
C. G. W.............	80.15		
Representative Lines in Southwestern Group:			Coal Carrying Roads:
A., T. & S. Fe.......	68.97	74.93	Leh. Val.
So. Pac.	68.77	64.01	P. & L. E.
St. L., I. M. & S.....	71.48	71.92	C. R. R. of N. J.
D. & R. G............	73.54	69.72	D. & H.
C., R. I. & P.........	83.06	74.66	P. & R.
St. L. & S. F.........	75.68	72.11	B. & L. E.
T. & P...............	82.82	73.13	Hocking Valley
M., K. & T...........	78.84	71.98	D. L. & W.
Mo. Pac.	87.75		
			C. F. A. Lines:
		98.53	C. C. C. & St. L.
		85.14	P. C. C. & St. L.
		86.92	C. I. & L.
		86.37	Vandalia
		89.12	C. & E. I.
		92.39	L. E. & W.
		87.31	G. R. & I.
		82.98	C. I. & S.
		93.06	Wabash
N. W. Group........	71.48	81.45	35 Systems, Eastern Case
		93.04	C. F. A.—Group III Eastern Case
		87.58	C. F. A.—Group I Eastern Case

Authority: I. C. C. Preliminary Abstract of Statistics of Common Carriers for the year ended June 30, 1914.

Note: The above ratios were computed after revising the Operating Revenues by adding Revenue from Outside Operations and Rentals and after revising the Operating Expenses by adding Expenses of Outside Operations, Rentals and Taxes.

It will be noted the operating ratio in the Northwestern group for 1914 was 71.48, while in the Eastern territory

for the 35 systems the ratio was 81.45, for C. F. A. lines Group III., 93.04, and for C. F. A. lines Group I., 87.58.

Using the operating ratios to which we have been accustomed in the past, which are given on the preceding table, it will be noted that for the Northwestern group, the operating ratio was 65.49 compared with the ratio of 75.96 for the 35 systems in the Eastern Case, 84.48 for C. F. A. lines Group III, and 80.23 for C. F. A. lines Group I.

HORIZONTAL INCREASE IN THE EAST.

While there was a general uniform advance in the east except for short hauls, in this Western case the carriers propose innumerable variations in the advances, ranging from 5% to 100%. Practically the entire advance is centered upon a dozen commodities, and in only a limited portion of the territory.

RAILROADS IN THE EAST.

The railroads in the east were constructed at a much heavier cost to the carriers by reason of the fact that they followed population instead of preceding it. They connected cities already established and thriving. In the west, the railroads very largely preceded population and civilization. Much of the right of way has cost them practically nothing. The growth of the west, accompanying the railroad construction, has been phenomenal in character. The vast extent of land bonuses, aggregating millions of acres, larger than the German Empire—which is exclusive of the enormous gifts of cities, counties, states and individuals—has made the actual investment of western railway companies very small compared with that of eastern companies.

The commercial development of the east has passed its zenith; the center of manufactures and the center of pop-

ulation are rapidly approaching the western district; in other words, we are now witnessing, and will witness during the next quarter of a century, a continuous growth in the west, southwest and northwest, far surpassing the commercial development of the east.

WEAK SISTERS VERSUS REPRESENTATIVE RAILROADS.

One of the striking contrasts between the two cases relates to the character of the testimony offered. In the Eastern case the presidents of the representative railroads took the stand to testify as to their financial needs, including such companies as the Pennsylvania, Baltimore & Ohio and New York Central, three railroads which handle over 40% of the traffic in Official Territory.

In the Western Advance Rate Case of 1910, the chief executives of both Western and Eastern lines testified as to their financial condition and need of additional funds, and as to their alleged inability to secure the same.

In the present Western case, the only railroad official representing any of the Northwestern group of railroads who offered any testimony whatever, was Mr. Felton, President of the Chicago Great Western Railroad, commonly recognized as one of the weak properties in the territory.

In the Northwestern group of railroads the great bulk of the traffic handled is carried by the Burlington, the North Western, the Milwaukee, the Chicago, St. Paul, Minneapolis & Omaha, the Soo Line, the Union Pacific, the Northern Pacific and the Great Northern Companies. No man took the stand who could testify that any of these railway companies were not able to secure all the money they needed for betterments, improvements and extensions. No man took the stand to testify that these companies were in a good condition or a poor condition, financially or physically. Mr. Felton gave a lot of glittering generalities about the railroad industry, but when asked

specific questions as to other properties, he plead ignorance, and, when asked specific questions as to his own property, he admitted that it was not an average or typical property in that territory; that it was in a better condition physically and financially than in 1910; and that the Commission found it not entitled to any advance in 1910. (tr. 194.)

In the Southwestern Territory, no official nor any person connected with the financial needs of the carriers, such as the Santa Fe, Southern Pacific and St. Louis & Southwestern, offered any evidence. The only perhave the testimony alone of Mr. Wettling. The only persons acquainted with the financial needs of any other southwestern railroad, aside from those we have named above, were Mr. Bush of the Missouri Pacific, Mr. Schaff of the Missouri, Kansas & Texas and Mr. Lusk of the Frisco.

J. W. Lusk, one of the receivers of the Frisco line, made some sweeping statements about the poor conditions of railroads. His published statement that the railroads "were in the soup" proved to be founded merely upon a general impression, and was not based upon any investigation of his own. He admitted finally that his knowledge was restricted to the Frisco, and he did not know anything about that prior to December 5, 1913; that he had never investigated the financial condition of the railroads as a whole in this territory; that he did not know that their net earnings in 1913 were greater than ever before in their history; and he was unable to name what were the average or representative roads in this section. (tr. 589, 592.)

The testimony of the other two gentlemen, testifying as to the M., K. & T. and the Missouri Pacific, will be discussed in connection with the territory to the Southwest generally.

THE CARRIERS' EXHIBITS.

The carriers' exhibits do not contain the data as to property investment, capitalization, or rate of return on individual companies. Other items they give individually, but these basic factors they do not.

No witness took the stand who had any personal knowledge as to the operating conditions or physical needs of any of the carriers in the case, with only four exceptions, the Chicago Great Western, M., K. & T., Missouri Pacific and Frisco.

There was no discussion whatever of the condition of any other carrier in the territory, except as the same may be shown in statistical tables compiled from records on file with this Commission.

Mr. Wettling was the only witness offered on behalf of the other companies in the case. He was unable to state whether any railroad was unable to secure all the money that it needed. He disclaimed any knowledge of their conditions or needs, financial or physical. He did not know whether they had any trouble in disposing of their securities for needed additions and betterments. He made no claim that they did not have adequate money to maintain their properties. He did not know the rate at which companies in any other line of business in the United States were able to borrow money. He could not name any company in any other line of business that had any better line of credit than representative lines of railroads in this territory.

THE EMERGENCY IN THE EAST.

No emergency or crisis exists among our Western railroads as our Eastern friends sought so earnestly to prove concerning their properties. No attempt was even made to prove an emergency of that character demanding im-

mediate relief. In doing this, the railroads in the west have acted wisely and properly, for there is no crisis.

Several other marked differences between the situation in the east and the west are disclosed by the supplemental opinion in the Five Per Cent Case.

The opinion states the "facts disclosed and occurrences originating" subsequent to the date of the original order, and which facts justified a change in the original order, "as presented at the further hearing may be summarized—first, complete returns for the fiscal year ending June 30, 1914, and returns for succeeding months; second, the war in Europe."

Let us now consider how these two important additions to the hearing in the Eastern case, which justified a conclusion of a more crucial situation existing in that territory, compared with the record as now completed in the Western Advance Rate Case.

At the time of the original hearing you only had before you the facts as to July and August of the fiscal year 1914. At the time of the rehearing, you had complete reports for that year, and, in commenting upon those complete reports, you find "the indication is that some important items of cost have been relatively inelastic, or that a fall in gross revenues leaves an increasingly narrow margin of net revenue."

This remarkable conclusion is arrived at on the basis of the following fact: "While the gross revenue in that year declined only about 3.4% the net revenues shrank approximately 17.7% as against the previous fiscal year."

If that shrinkage was due to the manipulation or the adjustment of accounts, and independent of actual railway operations not handled to prove a point, then the conclusion reached by this Commission was unfounded.

Granted, of course, that the Commission is correct, then let us see if a similar situation exists in the west, for

if it does not, then no such conclusion as therein stated follows.

1914 LOWEST NET REVENUE SINCE 1908 IN EAST.

The Commission states in its supplemental opinion:

> "Not since 1908 have the net operating revenues of the carriers been so low as in the fiscal year ending June 30th, last." (32 I. C. C., 327.)

1914 HIGHEST NET REVENUE, SAVE 1913, IN WEST.

Let us turn to the Northwestern Group of railroads. We find the net revenue in 1914 to be $156,000,000. With the single exception, and that exception 1913, the net revenues of these Western railroads were greater in 1914 than in any other year in their history.

For fear the railroads will urge a different situation might result if you exclude the Union Pacific, Northern Pacific and Great Northern, we call attention to the fact that if you exclude those three railroads, the net revenue of the Northwestern Group amounted to $88,000,000 in 1914, which also (with only one exception) exceeded any other year since the first track was laid west of the Mississippi river.

Now turning to the Southwestern Group, we find the net revenue in 1914 to be $80,000,000, which, with only two exceptions, 1907 and 1913, was the greatest in their history, instead of being the lowest of any year since 1908.

EUROPEAN WAR.

As to the second basic factor presented at the rehearing of the Five Per Cent Case, the evidence offered at that hearing on behalf of the carriers and (quoting again from the decision of the Commission), "on behalf of the investment bankers who appeared at the hearing, that the war in Europe has created a condition which renders the diminution of the carriers' net income a menace to the

prosperity of the country; that the war has placed an added strain upon the credit of carriers; that rates of interest will rise; that a large volume of railroad securities is held abroad; that the denial of the increase in freight rates would, in view of the diminished net income, be followed by a dumping of foreign securities upon the American markets; that our markets would not be able to absorb these securities—at least, without great fall in price; that disaster would result not only to our railroads, but to insurance, banking and industrial concerns; and that for these and other reasons, extending far beyond the direct needs of the carriers themselves, we should now allow the proposed increase in rates." Id. 32 I. C. C. 329.

As a result of this evidence which seemed to be persuasive, the Commission reached the conclusion as follows:

> "The conflict in Europe will doubtless create an unusual demand upon the world's loan fund of free capital, and may be expected to check the flow of foreign investment funds to American railroads. It appears that our railroads represent the bulk of European investment in this country. The rate of interest—the hire of capital—has risen during the last decade, and may rise still further." Id. 32 I. C. C. 329.

In addition to this the Commission also found as follows:

> "Whatever the consequences of war may prove to be, we must recognize the fact that it exists, the fact that it is a calamity without precedent, and the fact that by it the commerce of the world has been disarranged and thrown into confusion." Id. 322, I. C. C., 330.

In striking contrast to the situation as portrayed by the bankers and railway officials who testified before this body, we now find that after almost a year's duration of the European war, money is a drug on the market; that

interest rates are lower than they were before the war; that American securities have not been dumped on American markets, and as a culmination of it all, the Western railroads deliberately abandoned the war as any argument or justification for an advance in freight rates.

This remarkable sequel to the testimony of railway and banking officials is another great warning to this Commission against placing too much confidence in the claims of these gentlemen. You have had another great warning. You mention it in your decision when you state:

> "True, the representations of the carriers in the 1910 cases, that without the increases then sought their credit must totally vanish, proved strangely at variance with their subsequent experience in the borrowing of many hundreds of millions." 32 I. C. C., 329.

However, this time you saw fit to place reliance in their claims, for your very next sentence was:

> "But we do not doubt that the financial problems of the carriers have been made much more acute by reason of the war, and if we are to set rates that will afford reasonable remuneration to these carriers, we must give consideration to the increased hire of capital as well as to other increased costs." 32 I. C. C., 330.

Now listen to the testimony of one of the witnesses put on the stand in the Western Advance Rate Case, Mr. Felton, the president of the Chicago Great Western Railroad:

> "Mr. Thorne: Mr. Felton, can you name any increases in the cost of supplies of a substantial character since the beginning of the European war affecting a large or substantial part of your operating expenses?
>
> "Mr. Felton: Since the commencement of the European war?
>
> "Mr. Thorne: Yes.

"Mr. Felton: No, sir, I don't think there has been any increase.

"Mr. Thorne: Any increase in wages of a sub-tial character?

"Mr. Felton: There have been demands enough; they are not increased yet. (tr. 187.)

Again, as to the war, listen to Mr. Felton's statements that remain unqualified by any other witness:

"Mr. Thorne: Can you borrow money as cheap now as you could before the war commenced?

"Mr. Felton: You can borrow money as cheap to-day for short terms, I should say, as you could before the war commenced, but since the war we have paid as high, as I told you, as 7½% for one year money.

"Mr. Thorne: What month was that?

"Mr. Felton: That was November.

"Mr. Thorne: Can you name any other company in any other line of business in that month that was able to borrow at a cheaper rate than you?

"Mr. Felton: No, I think not. I think higher rates than that were paid. (tr. 187.)

After the first war scare was over interest rates began to drop. Money in Europe or money that was accustomed to seek the markets of Europe hunted opportunities for investment in this country.

Mr. Felton readily recalled an issue of securities by the North Western that sold at a rate of 5%.

Those who have been following the money markets during the past few months know a large number of railroad issues that have been made at less than 5%.

Finally, in the cross-examination of Mr. Hopkins, Mr. Norton, attorney for the Santa Fe, objected to the witness referring to the war, saying: "We have nothing on here as to the war."

Then the record shows the following:

> "Mr. Thorne: You do not place any reliance on the war as justifying your advance in the freight rates?
>
> "Mr. Norton: No, we have no figures which are affected by the war; nobody knew June 30th, except the Kaiser and a few others, that there was going to be a war." (tr. 8139.)

And in no part of their testimony do they rest upon the European war, as was done so eloquently and forcibly by bankers, railroad presidents and railroad attorneys in the East.

Consequently we are relieved in the discussion of this case from the consideration of the effects of the European war, which was the second important foundation for the supplemental opinion in the Eastern Advance Rate Case.

INADEQUATE MAINTENANCE IN EAST.

Another striking difference between the Eastern and Western situation is the following as to what the Commission found:

> "While there has been recently an enlarged expenditure for maintenance of equipment, it is clear that it has not been sufficient to restrict to proper limits the number of cars and locomotives needing repairs." 32 I. C. C., 328.

Statements of a character similar to this have been printed in advertisements marked "paid advertisements," consisting of two or three columns in several hundred western newspapers.

There are such things as admissions and statements made by parties to a case outside of the actual trial being admissible in a court room. They are frequently the most searching and telling criteria to test the credibility of a witness; and there should be some degree of accountability developed as to these railroads and their agents, that

will prevent them from indulging in wholesale false advertisements and misrepresentations before the public, without there being any responsibility for the same assumed later before this tribunal. In making reference to this subject in this manner, we have one rather respectable precedent for such action in 20 I. C. C. at page 318.

There is no testimony in the record as to just how much does constitute a reasonable number of "bad order" cars. There will always be some bad order cars. It would be extravagant to maintain the whole property up to "condition new." On the other hand, it is possible, as stated by the Commission in the Eastern Case, for the carriers to fail to have adequate money to maintain their properties in the manner in which they should be cared for.

ADEQUATE MAINTENANCE IN WEST.

Mr. C. C. Wright, chief counsel for the carriers in the West, removed this issue from the case by a concession of record that the Western railroads were able to maintain their properties as they should be. (tr. 4663, 4664.)

SELECTED LIST OF RAILROADS.

The carriers in the present proceeding claim to try this case on the basis of the showing as to conditions as a whole. They have attempted to show these conditions in the entire Western territory, and second, in certain portions of that territory by certain groups of railroads.

In the Eastern Case carriers include all the railroads serving the territory. In the present Western Case the exhibits offered by the railroads constitute a selected list of companies, leaving out four strong railroads, as well as a number of small ones that were specifically named in the Commission's Suspension Order. Two-thirds of the mileage of one of these railroads omitted is located in Kansas and Nebraska. Every car of grain and every

car of live stock moving from practically every town located on this railroad will pay the advances involved in this case.

SYSTEM FIGURES VERSUS SUBSIDIARY LINES.

In the Eastern Case the railroads used system figures. In the statistics filed in this case by the carriers, they omit the Southern Pacific and include in lieu thereof, four of five subsidiaries, most of which made splendid deficits last year.

The Southern Pacific is, as is known, one of the great railroad properties of the country. It is true it extends to California; but it is also true that the Santa Fe extends to California, and they include the Santa Fe in their tabulation. The inclusion of a part of the strong lines and the exclusion of others that are equally strong or better, simply serve to reduce the general or consolidated average upon which such great reliance is placed.

TERRITORY AND RAILROADS INVOLVED.

There are two methods of analyzing the adequacy of railroads in any given territory. One is to select a few representative companies and make an analysis of their financial and physical conditions, considering them representative of the territory as a whole. The second method is to get a composite average of all the railroads serving a given territory.

The first method named is the one adopted by the Commission in the three advanced rate cases of 1910, decided February 22, 1911. The second method is the one pursued by the Eastern railroads in the advanced rate case last year. The Eastern carriers were careful to conscientiously include all of the railroad systems serving the territory that had a substantial proportion of their mileage in the territory.

If you adopt the second method, the consolidated average figure, it becomes all-important that you shall fairly include all classes of railroads that serve substantially the territory involved and that do not have the bulk of their traffic outside of that territory.

A violation of that fundamental principle can produce all sorts of distorted results. The railroads are so interlaced throughout different parts of the nation that if in any given territory you exclude strong lines having fifty or seventy-five per cent of their mileage in a territory, and include all weak lines having but ten or fifteen per cent and more of their mileage in the territory, you can produce one consolidated average. On the other hand, if you include all strong lines, even though they have only ten or fifteen per cent of their mileage in the territory, and exclude many of the weak lines, regardless of what proportion of their mileage and traffic is in the territory involved, you can produce a result precisely the opposite from the above.

A selected list of railroads is worse than useless when you are trying to find the consolidated average, and are going to place any weight upon that figure as representative of the adequacy of revenues as a whole in a given territory. It is worse than useless; it is deceptive, misleading, untrue and unjust.

This case does not concern only the rates on grain and live stock, when you are considering the adequacy of the revenues as a whole. In that event we are analyzing their financial conditions, the crystallization of all of their financial operations, including all their freight traffic and all their passenger traffic. We must first consider the situation as a whole in a given territory; whether it is one state or five states or twenty states, the all-important thing is to take all of the railroads that can fairly be considered representative and serving the territory involved. It would be entirely unfair to include a company having

only ten per cent of its mileage in a given territory in any total which purports to show financial conditions as a result of the rates in that section. The financial condition of such a railroad would reflect the adequacy of rates in the territory where ninety per cent of the mileage is located.

For the foregoing reasons we must give very careful thought to the selection of the railroads that go into any composite figure. We should either take a few typical properties, or, if we take a composite average, we must include all the strong as well as all the weak ones. A composite average derived from a selected list does not reflect the conditions in a territory as a whole unless your selected list is truly representative.

In his opening statement Mr. Wright said that they would offer statistics covering the territory as a whole, as distinguished from the weak lines or the strong lines. He stated they had pursued this policy in conformity with the suggestions of the Commission in other cases. Now let us see how that promise has been carried out.

For several years it has been common knowledge that the Western railroads were going to ask for a general advance in their transportation charges. During the past two years this movement has been evidenced by many thousands of tariffs filed with the Interstate Commerce Commission proposing increases in classification ratings, rules, regulations, minimum weights, additional charges for various services, including refrigeration, stopping in transit, demurrage, and advances in specific rates, on scores of different articles. Finally on May 21, 1914, at a conference held in Chicago, the plans for a general movement for advanced rates were formulated. (Tomlinson, tr. 11520.)

The carriers who were respondents in this case filed over 1,000 tariffs and supplements effective December 1, 1914, and shortly thereafter these were suspended by the

Interstate Commerce Commission, and constitute the basis of the present proceedings, together with the tariffs suspended in 19 supplemental orders.

Subsequently some of these tariffs were separated and given other numbers on the docket of the Commission. Other large and important advances made prior to that time, have also been suspended, and some of these are still pending before the Commission, presumably waiting the present investigations as to the revenues of the carriers. Other substantial advances by these same carriers, and other railroads serving the same territory, have been suspended and separate cases have been made of them.

It is fair to consider this whole series of advances as a part of a general movement to increase the revenues of Western railroads. There will be no serious question of that fact by any person. These general advances in freight rates were followed by a proposed general advance in passenger rates, throughout the same territory, and by the same railroads.

The railroads named in the original suspension order of the Commission were 41 in number, as follows:

1. Atchison, Topeka & Santa Fe Railway Co.
2. The Chicago & Alton Railroad Company.
3. Chicago & Eastern Illinois Railroad.
4. Chicago & North Western Railway Company.
5. Chicago, Burlington & Quincy Railroad Co.
6. Chicago, Great Western Railroad Co.
7. Chicago, Milwaukee & St. Paul Railway.
8. Chicago, Rock Island & Pacific Railway.
9. Chicago, St. Paul, Minneapolis & Omaha Ry.
10. Choctaw Railway & Lighting Company.
11. The Colorado & Southern Railway Company.
12. El Paso & Southwestern System.
13. Fort Smith & Western Railroad Co.

14. Galveston, Houston & Henderson R. R.
15. Great Northern Railway Company.
16. Hillsboro & North Eastern Railway Company.
17. Illinois Central Railroad Company.
18. The Kansas City, Mexico & Orient Railroad Company.
19. The Kansas City Southern Railway Co.
20. Midland Valley Railroad Co.
21. The Minneapolis & St. Louis Railroad Company.
22. Minneapolis, St. Paul & Sault Ste. Marie Ry.
23. Missouri & North Arkansas Railroad.
24. Missouri, Kansas & Texas Railway Company.
25. Missouri, Oklahoma & Gulf Railway Company.
26. The Missouri Pacific Railway Company.
27. St. Louis, Iron Mountain & Southern Railway Co.
28. Morgan's Louisiana & Texas Railroad & Steamship Co.
29. Louisiana Western Railroad Company.
30. Iberia & Vermillion Railroad Company.
31. Lake Charles & Northern Railroad Company.
32. Northern Pacific Railway Company.
33. Oregon Short Line R. R. Co.
34. St. Louis & San Francisco Railroad.
35. St. Louis, Rocky Mountain & Pacific Railway Company.
36. St. Louis Southwestern Railway Co.
37. The Texas & Pacific Railway Company.
38. The Trinity & Brazos Valley Railway Co.
39. Union Pacific Railroad Company.
40. The Wabash Railroad.
41. Wisconsin & Michigan Railway.

Some of these are subsidiaries of others. The reason for arranging them in that manner was because Mr. Wettling did so as to his companies, whether parent or subsidiary, in the body of his exhibit where he lists his 41 railroads. This is a striking coincident when one

finds that Mr. Wettling has added a large number of weak railroads, and omitted a number of strong lines embraced in the Commission's order.

In addition to the foregoing railroads that were specifically named, the original suspension order of the Commission also included a long list of tariffs issued by the Western Trunk Line Committee, the Trans-Missouri Committee and the Southwestern Committee. The supplemental orders of the Commission did not add any carriers of substantial importance serving this same territory, to any considerable extent.

If a person took all the railroads named in the committee tariffs which have been suspended by the Commission, he would undertake an analysis of several hundred properties, many of which are outside of the territory involved.

A railroad like the Illinois Central has over eighty per cent of its mileage on which there would not be one car of grain, live stock, packing house products, fruits and vegetables affected.

The principal commodities involved in the present proceeding are grain, live stock, packing house products, fresh meat, coal, fruits and vegetables, hay, straw, broom corn and cotton piece goods.

The advances in grain rates are proposed from the great bulk of the stations in Kansas, Nebraska, Iowa, and several hundred stations in Minnesota, South Dakota and the southwestern states, to all of the principal markets in this portion of the United States, as well as for export; also on the proportionals from the principal markets, including Chicago, St. Paul, Omaha and St. Louis, to every part of the United States, and for export. Advances on live stock are proposed from the great bulk of the stations in the same territory. The territory to which each of the advances are applicable will be more

definitely described in separate briefs, covering the various commodities.

The territory embraced in the proposed tariffs can be roughly described as Western Trunk Line, Trans-Missouri and Southwestern Committee territories, embracing a portion of Illinois, Wisconsin, Minnesota, North Dakota, South Dakota, Iowa, Nebraska, Kansas, Missouri, Arkansas, Oklahoma, Louisiana, Texas, together with a portion of Colorado east of Denver.

The territory, and the railroads involved, are practically the same as those embraced in the two cases that were decided by the Interstate Commerce Commission February 22, 1911, known as the Western Advance Rate Case, and the one entitled *Texas Railroad Commission v. Atchison, Topeka & Santa Fe Railway Co., et al.,* being reported in 20 I. C. C. 463-485.

The Southwestern lines in the Texas Case included: Atchison, Topeka & Santa Fe; Chicago, Rock Island & Gulf; Chicago, Rock Island & Pacific; Fort Worth & Rio Grande; Galveston, Houston & San Antonio; Gulf, Colorado & Santa Fe; Houston & Texas Central; International & Great Northern; Missouri, Kansas & Texas; St. Louis Southwestern; St. Louis, Iron Mountain & Southern; Texas & Pacific.

Referring to the foregoing list, the Commission stated:

> "Of the four trunk lines that are defendants, viz., the Missouri, Kansas & Texas, the Atchison, Topeka & Santa Fe, the Chicago, Rock Island & Pacific, and the St. Louis & San Francisco, it is believed that the Missouri, Kansas & Texas, from a traffic standpoint, is probably the most typical and representative." (Id. 20 I. C. C. 469.)

It will be noted that the four trunk lines defendants in that proceeding are also respondents in the present case. It will further be observed that the list of railroads specifically named by the Commission in the decision, are

practically identical with the Southwestern lines respondents in the present proceeding. In addition to those specifically named, appearances are shown in that case for the Southern Pacific, the Missouri Pacific, and various other defendant companies.

In our discussion of the issues in this case we will observe the same division of companies and territories, as was adopted by the railroads and by the Interstate Commerce Commission in 1910. There are certain fundamental traffic conditions and financial considerations which justify the separation that was made. These are familiar to any person acquainted with transportation affairs in the West, and they are abundantly exemplified in the record in this case.

Mr. Wettling's exhibit presents the figures for 41 systems (so-called). Mr. Wright says that includes most of the principal lines throughout that territory served. The 41 railroads named and used by Mr. Wettling in his exhibit are as follows:

Atchison, Topeka & Santa Fe.
Chicago & Alton
Chicago & North Western
Chicago, St. Paul, Minneapolis & Omaha.
Chicago, Burlington & Quincy.
Quincy, Omaha & Kansas City.
Chicago, Great Western.
Chicago, Indiana & Southern.
Chicago, Milwaukee & St. Paul.
Chicago, Rock Island & Pacific.
Colorado & Southern.
Fort Worth & Denver City.
Wichita Valley.
Colorado Midland.
Denver & Rio Grande.
Fort Smith & Western.
Illinois Central.

International & Great Northern.
Kansas City Southern.
Louisiana & Arkansas.
Minneapolis & St. Louis.
Iowa Central.
Minneapolis, St. Paul & Sault Ste. Marie.
Wisconsin Central.
Missouri & North Arkansas.
Missouri, Kansas & Texas.
Missouri, Oklahoma & Gulf.
Missouri Pacific.
St. Louis, Iron Mountain & Southern.
New Orleans, Texas & Mexico.
San Antonio & Aransas Pass.
San Antonio, Uvalde & Gulf.
St. Joseph & Grand Island.
St. Louis & San Francisco.
St. Louis Southwestern.
Sunset Central Lines.
Trinity & Brazos Valley.
Texas & Pacific.
Texas Mexican.
Vicksburg, Shreveport & Pacific.
Wabash.

MR. WETTLING'S LIST OF RAILROADS HAS ALL THE ESSENTIALS OF A SELECTED LIST, AND CANNOT BE ACCEPTED EITHER AS COVERING THE SITUATION AS A WHOLE, OR AS CONTAINING THE REPRESENTATIVE RAILROADS SERVING THE TERRITORY INVOLVED.

By strange coincidence, in the body of Mr. Wettling's exhibit he lists just 41 railroads, each one as an individual company, although several are subsidiaries; and at the same time we find in the original suspension order of the Commission just 41 railroads specifically named, several of them being also subsidiaries. He includes a large number of railroads not named in the suspension order of the Commission and omits railroads that are specifically named in the original order of the Commission. The railroads Mr. Wettling omits are: Great Northern, Northern Pacific, Union Pacific, Oregon Short Line, El Paso & Southwestern, Fairmount & Veblin, Kansas City, Mexico & Orient, Midland Valley, Wisconsin & Michigan, St. Louis, Rocky Mountain & Pacific, Lake Charles & Northern, Iberia & Vermillion, Galveston, Houston & Henderson, Hillsboro & Northeastern, Choctaw Railway & Lighting Co.

Some of the foregoing were subsidiaries of those that were named in the Commission's orders. Those that were not named in the Commission's orders and not subsidiaries of those so named, and yet included in Mr. Wettling's list, are as follows:

San Antonio, Uvalde & Gulf.
San Antonio & Aransas Pass.
International & Great Northern.
Texas Mexican.

Louisiana & Arkansas.
Vicksburg, Shreveport & Pacific.

The Chicago, Indiana & Southern, added by Mr. Wettling, while included in a supplementary order of the Commission, is not located in the Western District, nor is it a subsidiary of any line located in the Western District.

In this list of railroads which Mr. Wettling omitted there are five strong properties.

This selection of railroads is not excusable on the ground that he simply used intrastate roads which joined in these through rates. The same excuse would apply to every other intrastate railroad in the same territory. On that basis he left out over two hundred railroads that serve this same territory. These are named on pages 5 and 5-A of Chambers' Exhibit 1.

This selection is not justified on the ground that in order to include Texas railroads he had to take some intrastate properties. As a matter of fact, the original suspension order includes 9 railroads that go into Texas, as follows:

Atchison, Topeka & Santa Fe.
Galveston, Houston & Henderson.
Kansas City, Mexico & Orient.
Kansas City Southern.
Missouri, Kansas & Texas.
Missouri, Oklahoma & Gulf.
St. Louis Southwestern.
Texas & Pacific.
Trinity & Brazos Valley.

The railroad companies used by Mr. Wettling in his exhibit, 41 in number, serve the following states that are located in Western Classification Territory:

Louisiana	Nebraska	Arizona
Arkansas	North Dakota	Utah
Missouri	South Dakota	Idaho
Iowa	New Mexico	Washington
Minnesota	Colorado	Wisconsin
Texas	Wyoming	Part of Illinois
Oklahoma	Montana	California
Kansas		

In making the above statement, we have not considered system figures; but we have used the so-called property investment figures used by Mr. Wettling, to determine the mileage covered by his exhibits. That mileage serves the territory we have described above.

The railroads Mr. Wettling included earned upon the common stock during the fiscal year 1914, according to the preliminary abstract of the Interstate Commerce Commission, 3.08%. The roads Mr. Wettling left out serving the same territory, earned 8.61%. That shows again that Mr. Wettling's is a selected list.

If the railroads in Western Classification Territory desired to put over an advance, if they had the courage, they could leave out of their list all railroads proposing advances, all the strong properties and include all of the weak lines. The result when you compile a composite or average for the entire group would be extraordinarily low, and not representative of the character of the territory. Certainly the Commission would not countenance such procedure as that. In order to test the adequacy of rates as a whole in any given territory, the Commission would surely include all of the railroads serving to a substantial extent that territory, and not permit such an average figure as would exclude strong lines, to be ac-

cepted as a test. Yet that is precisely what these Western railroads have undertaken to put over at this time, so far as they dared to go in that direction.

From the same territory as covered by his list, Mr. Wettling omitted two of the strongest roads in the Northwest, the Great Northern and Northern Pacific, one of the strongest in the central portion, the Union Pacific, and one of the strongest in the South, the Southern Pacific—which latter serves the same territory as the Santa Fe. Mr. Wettling included subsidiaries of the Southern Pacific, but ignored system figures. In this proceeding the Interstate Commerce Commission has suspended several thousand advances that were proposed by the Great Northern and the Northern Pacific. The carriers claim that these companies, and the Union Pacific, will receive a very small amount of increased revenue because of the advances on the Union Pacific; it being claimed that they will amount to $12,000 (tr. 14460-1-5) on the Great Northern, and $19,000 (tr. 14806) on the Northern Pacific.

The carriers have been required to file their division sheets. Let us consider the question on its merits.

Advances in the grain rates are proposed from practically every town in the states of Kansas and Nebraska, but because the Union Pacific does not go east of the Missouri River, the claim is made that it only shares in the advances to a small extent. Two-thirds of the mileage of the Union Pacific is located in these two states. Advances are proposed on the other interstate railroads serving those states, and most of these are included in Mr. Wettling's list. Why should not the Union Pacific be included? There are other advances it is proposing. The Union Pacific will profit by reason of the advances in passenger rates, to the extent of large sums of additional revenue. It will also profit by the elimination of the concentration of poultry, butter and eggs; a privi-

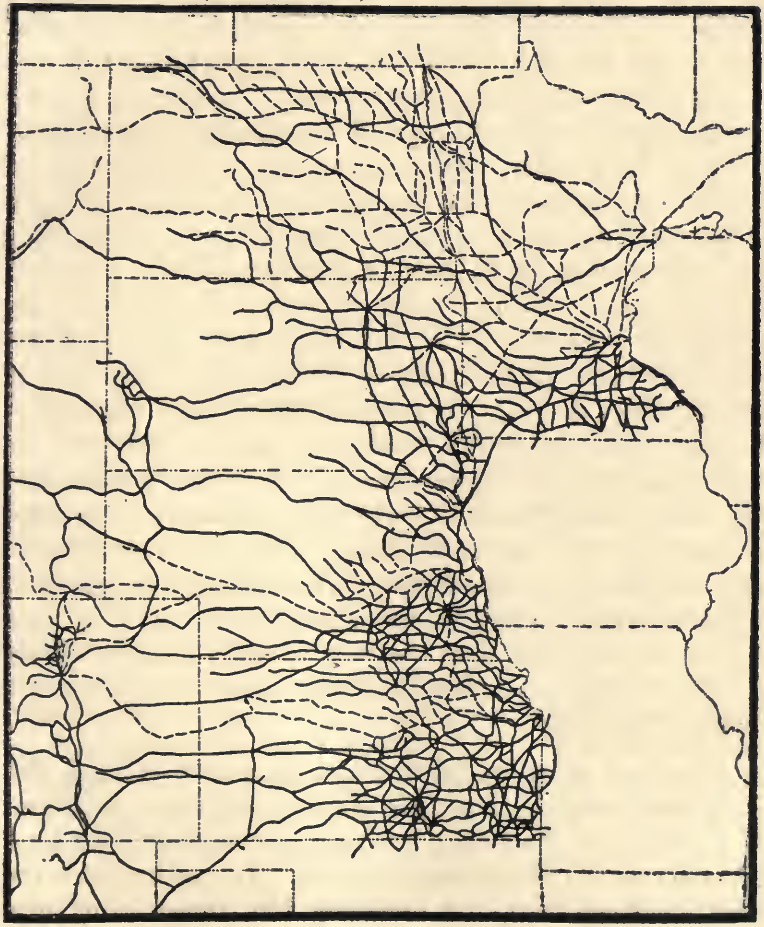
lege, when taken away, that will serve to advance freight rates. It will also profit by special charges for demurrage, for stopping to finish loading live stock, by the elimination of the stoppage-in-transit privilege on agricultural implements. The Union Pacific is participating with all the rest of the western railroads in a general movement to increase their revenues.

Mr. Hawley, who is secretary to Mr. Lane (the president of the Union Pacific Railroad) and is in the traffic department, representing the General Freight Agent, testified as follows:

> "Mr. Thorne: What was your volume of grain traffic from Nebraska and Kansas?
>
> "Mr. Hawley: I have no figures.
>
> "Mr. Thorne: It is very large, is it not?
>
> "Mr. Hawley: Yes; grain is one of our leading commodities.
>
> "Mr. Thorne Two-thirds of the mileage of your railroad is located in Kansas and Nebraska, is it not, if you exclude your system?
>
> "Mr. Hawley: I would say so; yes, sir.
>
> "Mr. Thorne: There are advances in the grain rates, whether you get any share of it or not, from every one of those stations, is there not?
>
> "Mr. Hawley: There is.
>
> "Mr. Thorne: You also are participating in this general movement to increase your charges for special services, stoppage in transit, demurrage, etc., heater service and refrigeration?
>
> "Mr. Hawley: I have no definite knowledge to that effect.
>
> "Mr. Thorne: That is true, generally speaking, is it not?
>
> "Mr. Hawley: Generally speaking I understand it is the entire West. (tr. 14475-6.)
>
> "Mr. Thorne: Mr. Wright, would you also care to produce the men that can tell us how much increased revenue there will be on the Oklahoma Gulf, the

Northeastern Texas & Mexico, the San Antonio, Uvalda & Gulf, the Missouri, Oklahoma & Gulf, the Missouri & North Arkansas? (tr. 14477.)

"Mr. Wright: I want to say to the Commission, as to the good faith in the selection of the roads, that it was made on account of this attack. I propose to give to the Commission as fully and fairly as I can what the situation is, so they may understand what the conditions are, and if there is any criticism in it I will take it, but that is the only reason and purpose for which I put this in, because of that objection and attack." (tr. 14477-8.)



The accompanying map shows by dashed lines the location of the Great Northern, Northern Pacific and Union Pacific; while the solid lines indicate the location of the railroads serving the same territory, but included in Mr. Wettling's list of railroads.

The Commission has separated the passenger rate case from the freight department of the investigation and yet the railroads are here trying to establish the inadequacy of revenues as a whole on the value of their property. This necessarily involves both the passenger and freight traffic. If the case had been consolidated, the Union Pacific would have been involved. It is not fair to take out a few of the strongest roads in the territory, eliminate them from your figures, and then prepare a consolidated average figure purporting to represent the revenues of all the railroads serving the territory as a whole. Even if they did not obtain a cent of additional revenue from this particular case; even if they absolutely refrained from filing a tariff or joining in any tariff proposing any advances, so as to be taken out of the case; still this Commission should exclude such a railroad which has half or two-thirds of its mileage in the territory in any analysis of the financial and traffic conditions and adequacy of the rate structure in that section of the country; otherwise the large railroads will always keep out and let the weak properties prove up their case. Later, when conclusions are reached as to the adequacy of revenues as a whole in a given section, whether state, territory or district, and that issue is closed, then the larger lines can come in and profit by other advances, as these large companies are doing at this time.

Attention is called to the fact that Mr. Wright was very much more enthusiastic about establishing additional revenues of the Union Pacific or Great Northern than on some of the Southwestern lines. Yet he includes the Southwestern lines and excludes the Great Northern.

Some of these little roads have not over 200 miles of track.

There is some confusion as to the precise boundary lines of the Western Trunk Line territory, and whether the Great Northern, Northern Pacific and Union Pacific should be included in our table. The index of stations published by the Western Trunk Line Committee includes no points in Kansas and Nebraska, and yet Mr. Spens admitted on the stand that certain traffic to and from points in Kansas and Nebraska was governed by the Western Trunk Line Committee. (tr. 14707; 14711-12.) Further, Mr. Condran testified in support of the same proposition. (tr. 13296-8; 13299-13301.)

We also call your attention to the tariff publications of these committees. For instance, turning at random to Supplement 27, Freight Tariff No. 13-G, of the Western Trunk Lines, immediately below it are listed the railroads issuing the publication. Among these are the Great Northern and Northern Pacific Railways.

If you will turn to Freight Tariff No. 18-H of Western Trunk Lines, you will find the issuing carriers are the Union Pacific, Northern Pacific and Great Northern.

Turning to Supplement No. 42 to Circular I-J of Western Trunk Lines, you will find among the carriers stated on the cover page, as issuing the same, to be the Northern Pacific and Great Northern Railways.

Freight Tariff No. 80-A, Western Trunk Lines, names the Northern Pacific and Great Northern.

Freight Tariff No. 54 of Western Trunk Lines names the Northern Pacific, Union Pacific and Great Northern.

Further we call your attention to the fact that all three of these railroads were specifically named as respondents in this case, in the suspension order made by the Interstate Commerce Commission.

Mr. Wettling, the principal witness for the carriers,

when on the stand was asked to name the representative roads serving the states of Iowa, Minnesota, North Dakota, South Dakota and Nebraska, and he included in his list the Great Northern, Northern Pacific and Union Pacific. (tr. 8627.)

Mr. Wettling has left out one of the strongest properties in the South—the Southern Pacific System; although he included some of the weak subsidiaries of this system that were earning deficits, leaving out the parent company, which is one of the richest in the whole territory. It is true the system goes from Texas to California, but it is also true that the Santa Fe goes to California, and he included the Santa Fe System. Further, it will be noticed that one of the strongest roads in the central part of the territory, is the Union Pacific which Mr. Wettling carefully omitted from his consolidated average; that the two strongest lines in the northern part of the territory, the Northern Pacific and the Great Northern, were again carefully omitted from the list.

The North Western is trying to profit in the same way as the Great Northern. If the North Western can include in the list making up the average the extremely weak lines of the southwest, and exclude the exceedingly strong lines of the northwest, of course it would drive the average down that much, even though a lot of strong lines are left in the list.

That method of proving the inadequacy of rates in a given territory, is shrewd, immensely shrewd; but possibly shortsighted in its shrewdness. By the same course of procedure the Eastern railroad could have eliminated the Pennsylvania, the New York Central, and the Baltimore & Ohio from their averages. By the same course of procedure in the 1910 Advance Rate Case, the railroads could have eliminated the Burlington and the Santa Fe.

At the beginning of the case Mr. Wright laid great stress on the proposition that they were going to consider

the territory as a whole and not to pick out the weak or the strong; further, he said they had included in their figures all of the important lines in the territory; the following is his exact language:

> "We have selected the principal lines which constitute 41 lines and systems. The roads which we have selected embrace practically all of the mileage in that territory of any important lines."

The carriers have failed to carry out that promise. In their consolidated figures offered by Mr. Wettling for the railroads as a whole, instead of covering all the railroads serving the particular territory described by Mr. Wettling, they have used a selected list; a selected list that is unjustifiably distorted, and presents results that are deceptive and misleading.

For the foregoing reasons, in our tables and discussions we will seldom make reference to the list of railroads that Mr. Wettling selected. We prefer to use the list of railroads the Commission named in their suspension orders.

We find the railroads specifically named in the suspension order of the Commission in this case to fairly represent the territory sought to be covered.

It will probably be conceded by all parties that the bulk of the advances lie in the following states: Minnesota, North Dakota, South Dakota, Nebraska, Iowa, Kansas, Oklahoma, Texas, Missouri, Arkansas and Louisiana. The Commission's original suspension order named 37 railroads, and four parts of railroads or subsidiary companies, making in all 41 railroads; if you use that term in the same way that Mr. Wettling arrives at his 41 railroads.

On page 1 of Vol. 1 of Wettling's exhibits, he lists 36 railroads and 28 subsidiaries. Turning to any page of his summaries which purport to cover the 41 railroads—

for instance, page 11—you will readily see what we state is correct. It will be noticed that he considers the following as distinct railroads, and among his 41, without any indication of their being subsidiary, and without any attempt to compile a system figure:

Roads included in Wettling list of 41 which are subsidiary lines:

Quincy, Omaha & Kansas City, subsidiary of C., B. & Q.; Fort Worth and Denver City, subsidiary of Colo. Southern; Wichita Valley, subsidiary of Colo. Southern; Iowa Central, subsidiary of M. & St. L.; Wisconsin Central, subsidiary of M., St. P. & S. S. M.; St. Louis, Iron Mountain & Southern, subsidiary of Missouri Pac.; New Orleans, Texas & Mexico, subsidiary of St. L. & San Fran.; St. Joseph & Grand Island, subsidiary of Union Pac.; Sunset Central Lines, subsidiaries of Southern Pac.; Trinity & Brazos Valley, subsidiary of C., R. I. & P. and Colo. Southern.

The Commission's list of railroads includes every interstate railroad serving what we have described as the Northwestern territory (north of Kansas and Missouri) except two properties of insignificant character, as follows: The Duluth, South Shore & Atlantic (which is in the northern part of Michigan and entirely outside of the Northwestern territory as previously described); and the Kansas City, Clinton & Springfield (an unimportant short line of railroad independent of any system in the case, having 162 miles, practically an intrastate road in Missouri, a railroad that has not filed any tariffs that have been suspended in this case).

Further, the Commission's list in its original suspension order includes all interstate railroads serving the Southwestern territory, with only exceptions as follows: Louisiana & Northwest, Louisiana & Arkansas, and Arkansas, Louisiana & Gulf. They are unimportant, independent short lines of railroad in Louisiana and Arkan-

sas, scarcely more than logging roads, and have filed no tariffs that have been suspended in this case. (tr. 13139.)

The bulk of advances involved in the case are located in the states above named, which comprise what is known as Western Trunk Line, Trans-Missouri and Southwestern Committee territories. The tariff publications of all three of these committees are embraced also in the suspension order of the Commission. For these reasons we use the Interstate Commerce Commission list of railroads.

The territory involved falls naturally into two groups, the railroads operating in the territory north of the line between Nebraska and Kansas and between Iowa and Missouri. With only one or two exceptions, the same carriers have but little mileage, common to both territories. There is just as distinct a demarkation, if not more so, in this respect with regard to the territory here under consideration, as that which exists between the Eastern and Southern districts, as classified by the Interstate Commerce Commission, lying east of the Mississippi River.

In our subsequent discussion, we will refer to three groups, first, the Northwestern group, which includes all railroads embraced in the suspension order of the Commission that serve the territory above described, north of the line between Nebraska and Kansas, etc., and excluding only those lines, two-thirds or more of whose mileage lies outside of the territory described. We have included, in what we shall call the Southwestern group, all the railroads serving the territory south of the line above referred to, and embraced in the Commission's suspension order, excluding only those having two-thirds of their mileage outside of the said territory. The relative size of these territories is indicated by the accompanying map.

A fact, worthy of mention at this time, is in regard to the Illinois Central. This property falls in the Southern district, where it has been classified by the Interstate Commerce Commission. In the first place,

it has only 16% of its mileage in this territory west of the Mississippi River, if you consider the railway proper, and only 9% of its mileage if you consider the system as a whole. The Commission itself, as stated, classifies this road in another territory than the one we are considering. With 84 to 90% of its mileage outside of the territory, it is not fair to consider it a representative railroad in this section.

In making our grouping of railroads we have studiously avoided any bias. We have sought to be absolutely fair, using not a selected list, but every railroad, whether weak or strong, rich or poor, that has at least one-third of its mileage within the territory.

The Commission may decide that it is time for it to recognize differences in the territory, in the traffic, and in the financial conditions of the carriers throughout this great western two-thirds of the nation.

You have already made a separation of the companies in the east. You divide one-third of the nation into two groups, and you leave the other two-thirds of the nation in one group or district. The differences in traffic conditions, and in the financial status of the western railroads have been established by this record, by the witnesses testifying on behalf of the public, as well as those representing the railway companies.

This Commission itself has had occasion to make a separation of the Western railroads, and you have reached different conclusions as to the financial needs of the Southwestern and Northwestern companies. In the case entitled *Railroad Commission of Texas v. A., T. & S. Fe, et al.,* 20 I. C. C. 463, the rates involved affected traffic to and from Texas, but you did not attempt to make any separation of that traffic for the purpose of analyzing the financial needs of the carriers. Instead of that, you made a comprehensive analysis of the adequacy of their rev-

enues from their entire lines. The group of railroads covered by you in that case included the Atchison, Topeka & Santa Fe, Chicago, Rock Island & Pacific, Chicago, Rock Island & Gulf, Fort Worth & Rio Grand, Galveston, Harrisburg & San Antonio, Gulf, Colorado & Santa Fe, Houston & Texas Central, Missouri, Kansas & Texas, International & Great Northern, St. Louis Southwestern, St. Louis, Iron Mountain & Southern and Texas & Pacific in addition. While that list embraced practically all that you made mention of in the decision, yet it will be noted that the Missouri Pacific was also a party defendant, and was represented in the trial, as well as other companies. In discussing the railroads involved in the case, you stated the following:

> "Of the four trunk lines that are defendants, namely the Missouri, Kansas & Texas, the Atchison, Topeka & Santa Fe, the Chicago, Rock Island & Pacific and the St. Louis & San Francisco, it is believed that the Missouri, Kansas & Texas from a traffic standpoint is probably the most typical and representative."

You follow this with a somewhat elaborate analysis of the financial condition of the Missouri, Kansas & Texas. The foregoing list of railroads corresponds very closely to what we have described in this case as belonging to the Southwestern Group.

It will be found that there are very substantial differences in the financial and operating conditions of the Northwestern and Southwestern railroads.

NORTHWESTERN GROUP.

On the same day that this Commission rendered its decision in the case of *Texas Railroad Commission v. A., T. & S. Fe, et al., supra,* you also rendered your decision in the case commonly known as the Western Advance Rate Case, this being February 22, 1911.

In this case the carriers proposed general advances on commodity rates, principally between the Missouri River and Chicago, although there were advances from points west of the river. At the present time the railroads are proposing various ways of increasing their revenues throughout the territory, both east and west of the Missouri River. An advance in freight rates on grain and live stock will affect practically all the towns in Kansas and Nebraska. The advances on grain go clear up into northern Minnesota.

Advances are also proposed on packing house products, mill products, fruits and vegetables, coal and broom corn. They reach up into North Dakota, South Dakota and as far south as Oklahoma and Texas, and to the Denver, Colorado, common point district.

In addition to these specific rate advances, carriers are proposing the elimination of stoppage in transit privileges on agricultural implements, concentration of dairy food products, demurrage charges, and a wholesale advance in passenger rates throughout all this Western territory.

Our original petition asks that all these matters be consolidated, and an investigation as to the adequacy of the revenues as a whole be made, but because of the varying conditions surrounding the different propositions at stake, these cases have been separated to some extent.

There are several ways of analyzing the adequacy of revenues. One is to select three or four typical, representative lines, and investigate them, somewhat extensively. That course was pursued quite generally in the 1910 cases. A second method is to take practically all of the carriers serving a given territory and arrive at a consolidated average. In either event, the selection of your roads becomes of paramount importance, and will control the conclusions that you may reach. In every territory, and in every industry, there are weak roads and

strong roads. At the very outset, the greatest of caution and deliberation should be taken; if you select weak roads you can prove one thing; if you select strong roads you can prove another.

This becomes of especial importance also when you adopt a so-called consolidated figure, representing the conditions in a certain territory as a whole. In any given territory only 10 or 15% of the mileage of some roads exists. If you include such companies as that, you are testing the adequacy of revenues in another portion of the nation where 85% of their traffic lies. On the other hand, if by some device or other you can arrange to eliminate a few of your strong roads in any given territory, although you may keep in the rest of your strong roads, you will reduce your average figure by that amount.

Another complication comes in the amount of territory that has to be considered. The Supreme Court has found it possible to consider individual roads in a given state; further to consider the state as a whole, and analyze the adequacy of revenues in that section of the country. These great western states are as large as many of the European nations. If the Supreme Court can find it advisable to perform that task, this Commission can. Because rates are inadequate in Arizona is no sign that they are inadequate in Illinois.

It is much easier to analyze conditions where a certain group of railroads handles the bulk of the traffic and the bulk of the mileage of the said railroads is located in that territory. That has been the occasion for the grouping of companies into different territories by this Commission in the past.

It must be remembered that Western Classification Territory is twice as large as the Central Freight Association, New England, Eastern Trunk Line and the Southern Districts all put together.

In adopting some divisional line, many things must be considered. One important effort should be to make the grouping fairly represent the territory. Sixteen per cent of the mileage of the Illinois Central Railroad is located west of the Mississippi River. Not a car of grain or live stock, or packing house products, fruits and vegetables, moving on 80% of the mileage of the Illinois Central system will be affected by the advances proposed in this case.

Thirty per cent of the mileage of the Wabash is located west of the Mississippi River. The same comment is applicable to that company.

The territory directly concerned in this case covers the following eleven states:

Minnesota	Kansas
Iowa	Missouri
North Dakota	Arkansas
South Dakota	Louisiana
Nebraska	Oklahoma
	Texas

This territory very naturally divides itself into two groups. We will call one the Northwestern Territory, the other the Southwestern Territory. There are several reasons why one group is quite distinct from the other. The great bulk of the mileage of the Chicago, Burlington & Quincy, Chicago & North Western, Chicago, Milwaukee & St. Paul, Great Northern, Union Pacific, Northern Pacific, Minneapolis & St. Louis, Soo Line, Iowa Central, Chicago, Great Western, is located in the Northwestern group. On the other hand, the great bulk of the mileage of the St. Louis & San Francisco, Missouri Pacific, Atchison, Topeka & Santa Fe, Chicago, Rock Island & Pacific, St. Joseph & Grand Island, St. Louis, Iron Mountain & Southern, Kansas City, Mexico & Orient, Galveston, Houston & Henderson, Ft. Worth & Denver City, Trinity & Brazos Valley, St. Louis, El Reno

& Western, Ft. Smith & Western, Missouri & North Arkansas, Missouri, Oklahoma & Gulf, Midland Valley, Lake Charles & Northern, Iberia & Vermillion, Louisiana Western, Morgan's Louisiana & Texas, St. Louis South Western, Kansas City Southern, Texas & Pacific, Missouri, Kansas & Texas, is located south of the line dividing Kansas from Nebraska.

The only railroad that overlaps to any extent in the two territories is the Rock Island, but practically two-thirds of its mileage is south of the line we have indicated. Another very important fact is that the Rock Island was in a very prosperous condition until it began building and reaching out into the Southwest. It is either that fact or its contact with the Moores and Reeds (and more probably both) that has produced the present condition of the Rock Island.

There are four reasons why the Rock Island belongs fairly to the Southwestern group.

First: The bulk of its mileage and traffic is in the Southwestern territory as described above.

Second: As long as its mileage was confined to the Northwest the prosperity and financial condition of the company was analogous to the representative lines of the Northwest, and there is apparently no reason today why it should not be on the same plane, because it has a very large tonnage in that territory, reaches large terminals, has main lines and feeders.

Third: Mr. Wettling, who was the chief witness for the railway companies in this case, classified the Rock Island as a Southwestern line, making the statement as follows:

> "Mr. Thorne: Now, considering the territory south of the line (tr. 4070) we have been discussing; what would you say were the four representative railroads serving that territory?
>
> "Mr. Wettling: The Santa Fe, the Rock Island, the Missouri, Kansas & Texas, and in the extreme

south the Sunset Central Lines. The Frisco is another that I really ought to include with the group.

"Commissioner Daniels: Would you omit the Missouri Pacific?

"Mr. Wettling: I do not like to omit the Missouri Pacific, but I was calling the largest of the systems.

"Mr. Thorne: Again, what would you say would be the four representative lines in that territory?

"Mr. Wright: Do you mean the biggest mileage, or what do you mean?

"Mr. Thorne: No.

"Mr. Wright: You can make them representative in several ways. That is the difficulty.

"Mr. Wettling: The Santa Fe, I should say, would be probably named first. I think the Rock Island is a representative line through the territory in the south and west of here, and has the largest percentage of its mileage south of the line named. The Missouri Pacific with the Iron Mountain would probably be more representative than the Missouri, Kansas & Texas alone." (tr. 4071.)

It is interesting to note that Mr. Wettling's selection of the representative Southwestern lines corresponds precisely, with one exception, with the selection made by the Interstate Commerce Commission of the Southwestern line in the case of *Railroad Commission of Texas v. A., T. & S. Fe, et al.,* 20 I. C. C. 463. The exception referred to is that the Commission named the St. Louis & San Francisco instead of the Missouri Pacific, named by Mr. Wettling.

Fourth: Mr. Millard, witness offered by the Interstate Commerce Commission, classified the Rock Island as a representative Southwestern line, and used the North Western road as a representative Northwestern line.

"The North Western and Rock Island furnished the most elaborate scheme of traffic statistics. On no other railroads could I find the number of merchandise cars, with the exception of the Santa Fe, and their traffic statistics are not compiled on the same basis as these others. I chose the Rock Island be-

cause it was a Southwestern road, and the North Western because it served the Western Trunk Line territory.'' (tr. 12957.)

JUSTIFICATION FOR DIVISION OF THE SOUTHWESTERN AND NORTHWESTERN GROUPS.

First: The Commission itself made a similar division, or grouping, of these railroads in 1910.

Second: The traffic conditions justify the separation. Illustrating this fact concretely, we cite the following from the testimony of Mr. Schaff, President of the Missouri, Kansas & Texas:

> ''There are special difficulties attached to railway operations in the Southwest which perhaps are not encountered in other sections of the country. The territory is largely dependent upon agriculture, cattle raising and similar pursuits, and is therefore subject to crop failures which naturally result in depressing trade. Outside of St. Louis and Kansas City, there are no large industrial and manufacturing centers to produce any considerable heavy moving throughout the year. The business is generally seasonable, and it is necessary to provide facilities during four or five months of the year, which must lie idle or nearly so during the remaining months.
>
> ''Generally speaking, the movement of traffic is largely one direction, which results in a large empty car mileage in the opposite direction.
>
> ''It has been difficult to increase either the average train load or carload even with the use of heavier capacity engines and rolling stock.
>
> ''A great deal of the territory is subject to floods, and much of it is semi-arid and subject to droughts.'' (tr. 49-50.)

Third: The financial condition of the carriers differs greatly.

A few facts illustrating the somewhat remarkable differences in the financial condition of the carriers in the Northwest and the Southwest justifying the consideration of these territories separately will be here presented.

The accumulated surplus earnings of the Northwestern and Southwestern railroads are shown on the following table:

TABLE M.

	Accumulated Surplus June 30, 1914	Cash on Hand June 30, 1914	Total Freight Revenue June 30, 1914	Total Dividends Declared June 30, 1914
Chicago, Burlington & Quincy	$ 93,194,107	$ 6,516,197	$ 62,799,188	$ 8,867,128
Chicago Great Western	3,582,175	2,577,355	9,943,575	....
Chicago & North Western	35,998,883	19,458,670	53,989,475	10,899,615
Chicago, Milwaukee & St. Paul	40,860,896	16,745,788	65,266,420	13,928,976
Chicago, St. Paul, Minneapolis & Omaha	4,097,426	1,016,097	11,427,563	2,086,900
Great Northern	65,099,244	5,507,710	55,025,016	15,063,048
Minneapolis & St. Louis	285,841	202,418	7,142,498	....
Minneapolis, St. Paul & S. S. M	14,576,890	4,479,428	20,372,247	2,646,714
Northern Pacific	84,772,460	6,595,904	48,058,812	17,356,220
Union Pacific	62,689,900	9,977,455	35,826,351	*30,431,020
Total Northwestern Group	$405,157,822	$ 73,077,022	$369,851,145	$101,279,621
Atchison, Topeka & Santa Fe	$ 20,569,801	$ 18,671,339	$ 61,089,211	$ 17,400,440
Fort Smith & Western	D 1,615,095	....	398,884	....
Galveston, Houston & Henderson	D 21,773	41,035	218,710	....
Chicago, Rock Island & Pacific	6,199,841	5,757,654	42,348,182	1,871,763
Kansas City, Mexico & Orient	163,782	30,194	672,426	....
Kansas City Southern	5,669,247	2,273,235	8,241,359	840,000
Midland Valley	D 970,668	229,607	1,043,000	....
Missouri, Kansas & Texas	4,832,457	1,458,801	20,228,337	261,429
Missouri & North Arkansas	D 600,783	93,363	792,106	....
Missouri, Oklahoma & Gulf	D 2,776,222	D 7,037	877,214	....
Missouri Pacific	3,580,246	509,503	19,490,425	....
St. Louis, Iron Mountain & Southern	239,024	654,196	24,504,603	1,775,649
St. Louis Southwestern	4,774,937	770,715	6,316,085	497,341
St. Louis Southwestern of Texas	D 935,028	186,306	2,979,058	....
Morgan's Louisiana & Texas	4,784,112	283,250	3,166,399	....
St. Louis & San Francisco	627,727	1,429,387	28,654,454	....
Texas & Pacific	D 10,264	481,265	12,712,344	....
Trinity & Brazos Valley	D 8,292,902	107,576	1,666,816	....
Louisiana Western	3,857,217	857,978	1,464,675	....
Iberia & Vermillion	33,805	....	48,022	....
Lake Charles & Northern	D 102,072	....	154,259	....
Total Southwestern Group	$ 40,007,389	$ 33,828,367	$237,066,569	$ 22,646,622

TABLE M.—Continued.

	Accumulated Surplus June 30, 1914	Cash on Hand June 30, 1914	Total Freight Revenue June 30, 1914	Total Dividends Declared June 30, 1914
Chicago & Alton	D $ 5,715,442	$ 993,680	$ 8,882,611	....
Colorado & Southern	1,518,498	451,406	5,619,585	340,000
El Paso & Southwestern Company	5,468,888	1,243,871	7,399,309	1,236,884
Oregon Short Line	23,191,562	525,117	15,557,631	10,000,000
St. Louis, Rocky Mountain & Pacific	D 1,104,665	7,983	178,025	....
Illinois Central	4,053,574	12,729,103	43,871,272	5,464,598
Wabash	D 13,430,196	1,242,683	20,199,493	....
Wisconsin & Michigan	D 248,228	....	112,048	....
Chicago & Eastern Illinois	D 1,012,197	1,578,929	11,324,292	....
Choctaw Railway & Ltg. Co	....	....	....	....
Hillsboro & Northeastern	....	....	11,340	....
Total all 41 Railroads named in Original Suspension Order of the I. C. C	$457,887,005	$125,678,161	$720,073,320	$140,967,725
Total all 41 Railroads, excluding Northwestern Group only	$ 52,729,183	$ 52,601,139	$350,222,175	$ 39,688,104

Authority: I. C. C. Preliminary Abstract for 1914.
*Excluding $67,351,870 Stock Dividends paid by Union Pacific.

The total accumulated surplus for the Northwestern group aggregated last year $405,000,000, while the total for the Southwestern group aggregated $40,000,000. The total for all of the railroads named in the Commission's order, exclusive of our Northwestern group, showed an accumulated surplus last year amounting to $53,000,000, compared with $405,000,000 for the Northwestern group, alone.

The dividends paid by the Northwestern group amounted to $101,279,621, while all of the rest of the railroads named in the Commission's Suspension Order paid dividends amounting to $39,688,104.

The average rate of net operating income on property investment in the Northwestern group amounted to 5.40% in 1914; in the Southwestern group it was 3.8%. (Compiled from Powell No. 2.)

If you exclude from the Northwestern group the Union Pacific, Great Northern and Northern Pacific, the average as shown by their surface figures in the Northwestern group without any analysis or alterating was 5.07%. If the Southwestern railroads had earned that much on their property, they would have increased their net operating income by $26,000,000. In other words, the Southwestern lines would have secured over twice the amount of additional revenue that all the railroads put together are asking for in this case, according to the claims of the carriers.

The Southwestern lines earned on their capital stock outstanding last year 2.57%, while the Northwestern group earned 8.39%. Excluding the Great Northern, Northern Pacific and Union Pacific, the Northwestern group earned 7.59%.

In 1913, the Northwestern group, excluding the Union Pacific, Northern Pacific and Great Northern, earned on

their capital stock 9.25%, while the Southwestern group earned 3.40%.

While these facts demonstrate a very great difference in the financial conditions of the Northwestern and Southwestern railroads, yet we do not attempt to say that there is any proof here that the Southwestern lines have proved their case. Such a conclusion should not be reached without a more thorough investigation than we have been able to give. We have only stated the surface figures without any critical analysis for those roads.

There are strong reasons why the state of Kansas should be included with the Northwestern group of states, instead of with the Southwestern group. Her production of grain and her farming are very analogous to the state of Nebraska. We hardly think, however, that the cross country check extends up and down for a distance of 400 or 500 miles; in fact, advances in grain rates have occasionally been made in smaller territories than that.

If it were not for the fact that Kansas is served by railroads that do not go up into the Northwestern territory at all, or practically not at all, such as the Missouri Pacific, Frisco, Missouri, Kansas & Texas and St. Louis Southwestern, it would be well to place Kansas in the Northwestern group. We have made some analysis of conditions, including Kansas and Missouri as a part of the Western Trunk Line territory in the Northwestern group, but if those two states are added, you will include territory that is served by mileage of the weaker Southwestern railroads, like those we have named. A very natural boundary line lies between the states of Missouri and Iowa, Kansas and Nebraska; yet there is strong reason why Missouri and Kansas should be included in the Northwestern group. For that reason we present alternating figures frequently. There is no question whatever but what the Northwestern group of railroads belongs in an entirely differ-

ent group from the Southwestern railroads. There are many reasons why the state of Kansas should be included in the Northwestern group.

CONDITIONS IN THE SOUTHWEST.

In addition to the foregoing extract from the testimony of Mr. Schaff, it may be stated in regard to conditions in the Southwest, that the companies seem to have been organized by a different group of financiers, and while their apparent returns may be small, it is very probable that if a proper investigation were made into their traffic conditions, and into the value of their properties, the result would be different.

Many miles of new railroads have been built throughout the southwest by private capital donated to the carriers in the form of special taxes and subsidies, and by exemption from taxation. In the state of Louisiana, the Constitution of 1898 exempted railroads built prior to January 1, 1904, from taxation for a period of ten years. By an amendment to the Constitution in 1904, this exemption was extended for a period of ten years to all new lines of railroads built from January 1, 1904, to January 1, 1910, so that it will be 1920 before all of the new lines of railroads in the state of Louisiana built prior to 1910 will begin to pay taxes.

Of course, from year to year, some of this mileage is removed from the exemption period. In the period from 1898 to 1910 there were built in the state of Louisiana 2,756 miles of new railroad, which paid, or will pay, no taxes for a period of ten years. Much of this new mileage received subsidies from the towns, cities and parishes (counties), through which the railroad was built. In addition to this, the railroads have paid out of their earnings for much of the new mileage built in the state of Louisiana in the period of ten years. This is especially true of the Texas & Pacific and the Southern Pacific

lines. Other states in the Southwest have had the same experience.

The present value of railroads may appear greater than the public expected, but the public itself has put its money into these railroads and built itself much of the new mileage in the manner indicated.

Our Committee would have liked to make a careful analysis of the Southwestern lines, but time absolutely prevented.

We have undertaken to cover the Northwestern group of railroads somewhat extensively, and have presented to you the surface figures for the Southwestern railroads without adequate check or analysis. We have undertaken to give somewhat greater consideration to the Santa Fe and one or two other representative lines in the southwest than to the other lines as a whole in that territory.

The record shows that while some of these companies have not been taken care of adequately in the past, that they are reaching a better plane in recent years. The following extract from the testimony of Mr. Bush illustrates this situation.

Mr. Bush candidly admitted that his railroad was better, both physically and financially, than in 1910, as shown by the following:

> "Mr. Thorne: What was the year you were over the road prior to your becoming president?
>
> "Mr. Bush: I should think about—it might have been in 1909 I went through to the coast and went over the Missouri Pacific.
>
> "Mr. Thorne: Would you state to the Commission the character of the road at that time so far as roadbed and equipment are concerned?
>
> "Mr. Bush: It was in, you might say, poor condition, especially the roadbed. It had a great deal of light rail and very little ballast, and it was not anywhere normal, you know; it would not be what

you would call anywhere near standard track. I could not speak as to the equipment; I did not observe it closely.

"Mr. Thorne: What was the cause of the condition which you describe? Was it delayed maintenance?

"Mr. Bush: Yes, it was delayed and deferred maintenance. They had not applied the heavy rail, and they were deficient in ties and ballast.

"Mr. Thorne: Would you describe the condition of that property as it is now, generally?

"Mr. Bush: Well, on what you call the main lines of the Missouri Pacific the 85-pound rail is the standard. The rail we are laying now is 90-pound and I think all of the main lines have had at least six inches or more of ballast applied, and the banks have been widened on what we call our main lines and our secondary lines.

"Mr. Thorne: What is your judgment as to whether you are keeping the equipment up better than it was in 1910, before you became president?

"Mr. Bush: Oh, well, I would have to keep it up better than it was kept up at that time or else I would not have it in service.

"Mr. Thorne: As a matter of fact you are, are you not?

"Mr. Bush: Oh, yes, sir; spending, I suppose, a million dollars a year more on maintenance of equipment than we were at that time. (tr. 447-8-9.)

"Mr. Thorne: Just frankly now, is it a fair statement to say that in 1914 and recently you are maintaining the Missouri Pacific at a higher standard than in 1910 and those years?

"Mr. Bush: That is correct.

"Mr. Thorne: In regard to the improving and the additions to your ballast, about how many years, in your judgment, or do you know, perhaps you do not know, the number of years they deferred the placing of new ballast and reballasting with rock or gravel back of 1910?

"Mr. Bush: I could not say as to that. I do not think there ever was a regular ballast program on

the Missouri Pacific up to the time I came there.

"Mr. Thorne: Probably delayed several years?

"Mr. Bush: Well, I think they tried to keep the road going, that was the amount of it. I do not think they had a regular laid out plan of improvement or betterment.

"Mr. Thorne: Is it not true that has had a great deal to do with the Missouri Pacific's lack of success?

"Mr. Bush: Well, I presume it has.

"Mr. Thorne: You have inaugurated a new policy in handling that property, in trying to build it up into a more efficient property?

"Mr. Bush: Well, I am certainly trying to get a road there that will meet the requirements of the shippers.

"Mr. Thorne: Do you know what the gross earnings of your property were in 1910?

"Mr. Bush: $53,000,000.

"Mr. Thorne: What were they in 1914?

"Mr. Bush: $59,000,000.

"Mr. Thorne: An increase of about how much?

"Mr. Bush: About $7,000,000.

"Mr. Thorne: What was the net in 1910?

"Mr. Bush: $15,000,000.

"Mr. Thorne: What is the net operating revenue for 1914?

"Mr. Bush: $16,457,000.

"Mr. Thorne: So that, in spite of maintaining your property at a higher standard, you have also had a million and a half greater net earnings?

"Mr. Bush: Yes, sir." (tr. 454-5).

AMOUNT INVOLVED.

The representatives of the carriers claim that the present advances only aggregate $10,000,000 (tr. 10). Further the counsel for the carriers state that the movement has been practically completed. As to this fact, the following was stated of record:

"Mr. Walter: Can you tell us whether all the

tariffs have now been filed that are a part of this general western advance? I do not mean the case here, but initiated at the same time as the tariffs under suspension in this case.

"Mr. Haile: Why, in the Southwest, I think, yes. I am not prepared to answer as to the Northwest, where our interest is little or nothing.

"Mr. Wright: I think they practically are, Mr. Walter.

"Mr. Walter: Can you state that formally on the record, Mr. Wright?

"Mr. Wright: Yes; they have been practically, except there may be some minor readjustments." (tr. 5833.)

Mr. Wright was asked to produce the witnesses who made these computations. They were never produced. It was promised repeatedly that Mr. Boyd would later take the stand and prove up the details. He never did so.

In this connection it may be well to note that the total freight revenues of the carriers, respondents in this case, aggregated last year approximately $700,000,000.

But let us accept Mr. Wright's statement as absolutely accurate; then we find the advances here proposed amount to approximately 1½% of their freight revenue. They proposed to secure $10,000,000 annually by making advances several times as great on certain selected commodities in certain selected sections of the territories served by these railroads; the great bulk of the advances being specifically limited to that territory between the Missouri River and Chicago; it being claimed by the carriers that no line operating west of the Missouri River secures any substantial division in the earnings, thereby throwing the burden of the advance on the traffic east of the Missouri River. The carriers propose advances ranging from 7% upward on different articles. If it be true that these carriers are in need of additional revenue, what justification have they for crowding it all on this selected part of their traffic. This action

cannot be justified in reason unless that traffic is not bearing its fair share of the transportation burden. Had the advances been spread out over 50% of the traffic as in the Southwestern Case of 1910 *(Texas R. R. Commission v. A., T. & S. F.,* 20 I. C. C. 463), there would have been more justification for the action, but when an advance of 1½% is proposed, and some people are compelled to pay an advance several times that amount, we are justified in demanding facts to support such discriminatory action. Advances proposed in the Eastern case and Southwestern Cases of 1910, and the advances proposed in the Eastern Case of 1914 were more general in character. If what the railroads here claim be true, that accentuates the necessity for a justification or reason for the particular selection which the carriers have adopted.

A request at the hands of this Commission for $10,000,000 from carriers whose gross earnings last year were $700,000,000, is not a legitimate request. Net revenues have fluctuated much more than that from year to year in this territory. There are no just grounds for concluding that their net income will not continue to do this in the future as it has in the past. For instance, in the Southwestern and Northwestern groups combined in 1898, in that one year there was an increase of over $24,000,000, both in net operating income and net corporate income. Again in 1901, there was an increase of $14,000,000 in net operating income and $7,000,000 in net corporate income. In 1906, there was an increase over the preceding year of $26,000,000 in net operating income and $27,000,000 in net corporate income. In 1907 there was an increase in net operating income of $20,000,000 and $26,000,000 in net corporate income. In 1913 there was an increase in net operating income of $45,000,000 over the preceding year, and in the net corporate income, of $40,000,000.

It is very apparent that a mere $10,000,000 increase for one year can easily be anticipated. We must not presume that similar developments shall not occur in the future as have in the past.

It is not for $10,000,000 that Mr. Wright and his associates are making this contest. These companies are seeking an advance in their passenger fares that will probably approximate 20% if they are successful in forcing it through on state and interstate business.

To lay a foundation on that basis, they seek to prove inadequacy of revenues as a whole. The passenger revenues last year were approximately $244,000,000.

A 20% increase (assuming two-fifths will travel on mileage books) will yield $48,800,000.

In addition to these we have increases being proposed daily by the carriers. There is now pending before the Commission an advance, from the far northwest, on live stock which has been pending for over one year. Other advances on concentration of dairy food products, elimination of certain privileges, stoppage in transit, and charges for demurrage services, etc. All of these will bring more revenues to the carriers.

If what these railroad companies are really seeking is an additional $50,000,000 in their net income, if they are successful and that $50,000,000 is divided between the Northwestern and Southwestern lines, in proportion to their present net corporate income, it will make this Northwestern group of railroads earn over 10% on their capital. The market prices of their bonds are today close to par. The market prices of their stocks, in that event, will soar higher than they are today; instead of averaging 125, as they do today, they will be much above 150.

COST OF RAILWAY SUPPLIES.

In the 1910 Advanced Rate Case, the Commission found, concerning the cost of railway supplies, as follows:

> "It was assumed at the initial stage of this investigation that railroad materials and supplies had greatly advanced in price within the past few years. Investigation was accordingly had into this question, and to our surprise, it may be said, it was discovered through figures furnished by the carriers and their admissions that, with the exception of fuel and ties, railway supplies and materials are today costing the carriers less on the average than in any of the past ten years." (Western Advanced Rate Case, 20 I. C. C., 367, 368.)
>
> "As to the increased cost in ties, while the standard white oak tie costs 5 or 10 cents more, the general increase in this expenditure is almost negligible, it being estimated from the reports furnished by the carriers that it will increase the cost of maintenance less than $50 per mile of road per year." (Id. 369.)

The analysis of cost of supplies made in this case demonstrates the same tendencies that the Commission found existing in 1910.

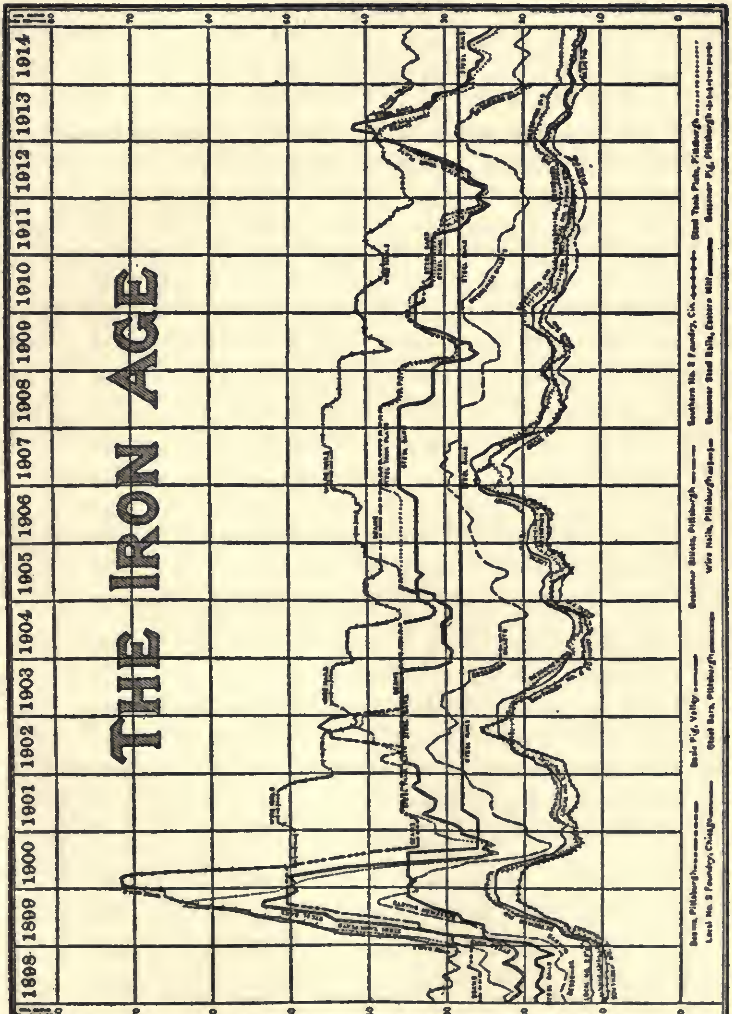
Steel rails is the most important item, and, as all know, and the record shows, these prices have remained practically constant for many years.

Further, we all know, and the exhibits in this case show, that the density of traffic has increased enormously during recent years compared with previous times. Consequently the cost of rails per ton mile has shown a substantial decline.

Next in importance to steel rails, are iron and steel products. The Wall Street Journal is responsible for the statement that thirty per cent of the iron and steel products of the country are consumed by the railroads. (Wall

Street Journal, January 26, 1914, p. 7, Ellis Exhibit No. 1, p. 3.)

There is a constant fluctuation from year to year in the prices of supplies. This is especially noticeable with reference to iron and steel products. In June of 1913, people would have been led to believe, as did the Secretary of the Iron Institute, that prices were going up;



Fluctuations in the Prices of Crude and Finished Iron and Steel from January 1, 1898, to January 1, 1915—Gross Tons

but future events demonstrated that that was purely a temporary phase of the situation. The steady downward trend on the principal iron and steel products, since 1900, is demonstrated by the accompanying chart, which covers steel bars, steel rails, Bessemer ingots, Bessemer pig, local No. 2 foundry, southern No. 2 foundry, basic pig, steel tank and wire nails.

The Norton chart, being the last page of Norton Exhibit No. 1, includes a miscellaneous list of railway supplies. This chart does not show the downward trend that has occurred on iron and steel products; but it indicates an advance on railway supplies up to 1907. Since then, however, there has been a decline, with fluctuations, on average prices, 1914 being at the lowest plane since 1907. This chart given in the exhibit, covers the prices on the following supplies: augers, axes, bar iron, barb wire, butts, chisels, ingot, copper sheet, copper wire, door knobs, files, hammers, lead pig, lead pipe, locks, nails, pig iron, planes, quicksilver, crosscut saws, hand saws, shovels, steel billets, rails, tin pig, wood screws, zinc sheet, etc.

The cost of ties, untreated, has probably risen in price. However, the carriers are putting in a great many more treated ties in recent years than during the earlier period. It is estimated that these ties will be much longer lived than the old wooden ties. It is difficult as yet, many engineers state, to determine how much additional life these ties will have. The life of a tie is variously estimated by American railways from 7 to 12 years. It has been stated that beech ties impregnated with 12 pounds of oil per cu. ft. have lasted 30 years on the Eastern railways of France. The French State Railway states the life of creosoted ties to be from 15 to 30 years. It is said that in the bridge of L. & N. R. R., over the mouth of the Pasagoula river, there are piles which have been treated with 20 lbs. of oil per cu. ft., which have been in

the structure for 28 years, and will be good for many years to come. Uncreosoted piles 1½ ft. in diameter, in this place, have been cut off by the teredo in a single year. (Ellis Exhibit No. 3, pp. 33 & 34.)

Considering the greater life of the tie, it is difficult to determine whether the cost of this supply, fairly chargeable to any given year's traffic, or any given amount of tonnage, has increased or decreased.

LABOR CHARGES.

It is claimed that labor is costing the railroads more money, and this is urged as a justification for increases in freight rates.

It is true that most railroad employes are receiving more pay per day in recent years than in earlier years.

Mr. Wettling produced two tables, attempting to show the increase in the amount of money paid to labor on western railroads. (Wettling Vol. 1, Exhibit 15 and Exhibit 4.)

This exhibit shows a very large increase of the amount paid labor in dollars and cents; further it shows a substantial increase in the wage paid per man.

Granting that these facts are correctly stated, it now becomes necessary to consider what conclusions can be arrived at from that table. It is impossible to determine from those figures presented by Mr. Wettling whether it is costing more or less per ton hauled a mile, or per dollar earned, in recent years than in former years, for the following reasons:

First: No account is taken in the said exhibits for the additional tonnage handled.

Second: The labor charges there summarized on those exhibits are not confined to railroad operation, but they include railway construction of betterments and improvements.

If the carriers should chance to do a larger amount of construction during the latter period than during the former period, the labor charges would consequently amount to a larger sum of money during the latter period than during the former period, and might make a larger labor cost per dollar earned, or per ton hauled a mile.

Such a conclusion, of course, would be fallacious. Including in this labor charge the cost of labor devoted to the construction of betterments and improvements completely invalidates the comparison.

That we are correct in the proposition that labor, connected with improvements of property, can be charged to operating expenses, we cite the following extracts from the record

> "Mr. Thorne: That account in the I. C. C. reports makes no distinction between labor that is used in operating a railroad and labor that might be used in new construction of additions and betterments, does it?
>
> "Mr. Wettling: It does not. (tr. 784.)
>
> "Mr. Thorne: That comparison is taken from the ordinary forms, of course, of the reports to the Commission?
>
> "Mr. Wettling: Yes, sir.
>
> "Mr. Thorne: There you do not have any division as between the labor that is used for betterments and improvements, or that which is used in ordinary maintenance?
>
> "Mr. Wettling: No, not as to improvements .
>
> "Mr. Thorne: You would have to make a separation before you could tell whether the cost per unit of traffic, cost of maintenance per ton mile, has increased or decreased, would you not?
>
> "Mr. Wettling: Oh, yes, although that might be done in a general way by comparing the additions and betterments activities of one year with another.
>
> "Mr. Thorne: Then could you suggest a method

> that would be fairly reasonable? How would you assume what portion of labor has gone into maintenance because of additions and betterments? How would you approximate it?
>
> "Mr. Wettling: I would make a study to find out about what proportion of additions and betterments would be represented by labor costs in some one year and make the proportionate deduction based on such a study as that and assume it held so on the average." (tr. 4113-4114.)

Considering the enormous sums in connection with betterments and improvements that can be included in such labor charges, as are presented in the compilation offered by Mr. Wettling, if a railroad company desires to raise the standard of its track throughout its entire system, removing old streaks of rust that have been stretched along the ground for a generation, tearing up old rails, putting heavier rails on every foot of track on the entire property, the total cost of picking up the old rails, tearing out the spikes, gathering the rails up, disposing of them, distributing the new rails, laying of new rails, together with all frogs, switches, ties, plates, protecting traffic in the meantime while this reconstruction is in progress, putting in cement bridges in place of wooden bridges, expensive tunnels, lining tunnels with concrete, putting in heavier expensive trestles, overhead crossings, etc., also a large part of the labor charges running into millions, would be charged to operating expenses, and made a part of the figures Mr. Wettling presents.

Wettling Vol. 1, Exhibit 15, shows the increase in labor, number of days worked, amount of compensation and rate per day, also a comparison of subsequent years with 1900. The first two items have no significance as they take no account of the very large increase in mileage and of traffic handled. The comparison, therefore, must be of the increase in the average rate per day and that should

then be compared to the traffic handled or the dollars earned.

Chambers Vol. 2, Exhibit 4, page 5, shows that the increase in labor for maintenance of way and structures per man per day on the Chicago, Rock Island & Pacific Railway was 5.52%, when comparing period 1905 to 1907 inclusive, and 4.24% when comparing period 1904 to 1907 inclusive, with period 1908 to 1914 inclusive. The reason for going back to 1904 only, as explained in his testimony, was on account of the very large increase in mileage taken in by this road in 1904.

This comparison of labor in maintenance of way and structures was not made for any other road, for the reason that the only other road of which an analysis was made, was the Chicago & North Western, and the labor factor did not enter into the compilation made.

Chambers Vol. 2, Exhibit 4, page 1, shows that the increase in labor for maintenance of equipment per man per day on the Chicago & North Western was 5.88%, when comparing the period 1901 to 1907 inclusive, with the period 1908 to 1914 inclusive. The same exhibit, page 3, shows the increase per man per day on the Chicago, Rock Island & Pacific Railway was 14.85%, comparing the period 1901 to 1907 inclusive, with the period 1908 to 1914 inclusive. The increase on the Chicago, Rock Island & Pacific Railway was considerably higher than on the Chicago & North Western, although the average wages per day in the period 1908 to 1914 inclusive, was less, being $2.32 per day on the Chicago, Rock Island & Pacific as against $2.34 on the Chicago & North Western, but the average rate per day in the first period was much lower on the Chicago, Rock Island & Pacific than the Chicago & North Western, making the increase larger.

The increase in machinist labor was greater than the other labor for maintenance of equipment, which might

make the amount chargeable to repairs of locomotives slightly more and repairs of freight and passenger cars less. Machinist labor being only about 10% of the labor for maintenance of equipment and the repairs of locomotives being almost exactly the same as repairs of passenger and freight train cars, the use of the average per day would not materially affect the total of maintenance of equipment.

While the average wages per day for maintenance have slightly increased the second period over the first, in order to determine whether labor is costing more or less, consideration must be given to the results obtained from a day's labor, and the cost of labor out of a dollar earned. This is readily determinable as far as "Transportation Expenses" are concerned, but it is impossible to obtain for maintenance until adjustment is made for additions and betterments charged to operating expenses and for raising the standard of the property.

Mr. Wettling claimed labor had increased more in transportation than any other department; that may be true per man, but when you come to apply it to the traffic handled you find labor costs have declined.

COST OF LABOR.

> "Mr. Thorne: Have you filed any statement showing the cost of labor per ton mile?
>
> "Mr. Felton: Labor in connection with transportation would show decreases, because of the increased train loading, sir."

TRAIN LOADING.

> "Mr. Thorne: About how much has your train loading, the number of ton miles, increased since 1910?
>
> "Mr. Felton: In 1910 our average tons of revenue freight per train mile were 302; in 1914, 474.75. (tr. 207.)

RETURN ON NEW CAPITAL.

The carriers have occasionally argued that they were unable to earn an adequate return upon new capital, and consequently this makes their securities unattractive to the investor.

In order to test the validity of this proposition, we have compiled the following table:

RETURN ON
NEW CAPITAL AND NEW PROPERTY INVESTMENT.
NORTHWESTERN GROUP.*
INCREASE OF 1913 OVER PREVIOUS YEAR SHOWN.

	Increase Net Operating Income	Increase Property Investment	Per Cent	Increase Net Corp. Income Plus Interest	Increase Total Capital Obligations	Per Cent
1913-1900	$77,466,353	$1,179,079,320	6.57	$115,666,524	$1,606,716,329	7.20
1913-1901	74,996,975	1,092,479,649	6.86	115,496,884	1,458,291,202	7.92
1913-1902	57,062,805	1,059,201,556	5.39	96,201,261	1,193,274,791	8.06
1913-1903	48,608,156	970,691,618	5.01	89,484,866	1,151,907,422	7.77
1913-1904	49,558,775	930,781,574	5.32	89,073,446	1,112,528,251	8.01
1913-1905	40,036,062	905,673,981	4.42	78,321,044	1,088,134,662	7.20
1913-1906	22,261,979	863,074,688	2.58	62,500,630	1,027,599,412	6.08
1913-1907	23,948,226	779,248,744	3.07	51,832,490	980,176,104	5.29
1913-1908	38,562,294	614,264,944	6.28	28,858,132	673,716,632	4.28
1913-1909	25,471,369	570,133,722	4.47	36,072,480	419,079,981	8.61
1913-1910	20,584,568	414,444,707	4.97	18,786,990	331,129,559	5.67
1913-1911	27,622,359	330,832,703	8.35	25,737,440	190,064,783	13.54
1913-1912	11,877,186	244,666,331	4.84	33,258,878	93,567,009	35.55

*Comprises the following roads: C. & N. W.; C., St. P., M. & O.; C., B. & Q.; C., M. & St. P.; C. G. W.; Iowa Central; Great Northern; M. & St. L.; Nor. Pac.; M., St. P. & S. S. M.; Union Pacific.

This table shows how much the Northwestern group of railroads had increased their property in 1913 over each one of the preceding years in the table. It also shows how much they had increased their net operating income, with the resulting percentage.

In the same way the table shows the increase in net corporate income in 1913 over each one of the preceding years, and the increase in capital stock in 1913 over each of the preceding years, with its corresponding rate of return.

REDUCTIONS AND ADVANCES.

It was sought by the carriers to give the impression that many reductions have been effected by state commissions on Western railroads. This was undertaken by numerous sweeping generalizations made on the stand, typical of what has been constantly stated and reiterated in the public press for a number of years. Upon the other hand, rarely does any person see anything about the advances that have been permitted in this same territory. Mr. Felton overstrained this point when he stated on the stand that only seven advances were put into effect in this territory last year. His exact language was as follows:

> "Mr. Felton: Mr. Thorne, let me answer you a little further, because I think I can make this clear to you. There are seven advances in our territory in the last year on seven articles and there are nine reductions.
>
> "Mr. Thorne: Do you seriously maintain that there have only been seven advances in the past year in your territory?
>
> "Mr. Felton: That is in our territory, yes, sir. That statement I had prepared yesterday and it shows nine reductions on certain commodities. The traffic officials will bring all that out." (tr. 271-272.)

To test the accuracy of Mr. Felton's statement, a competent rate man was asked to make a check of the ad-

vances that have been permitted by the Commission to become effective during the last year, that were proposed by the railroads respondent in this case. Mr. Kirkland was employed for this task. He was formerly in the General Freight Department of the Illinois Central Railroad, and has had 25 years of experience in this kind of work.

Mr. Kirkland found advances had been made since January 1, 1914, on 147 articles; that these advances aggregated in number 6,735, instead of 7, as Mr. Felton stated. These six thousand advances are in addition to large and substantial changes in classification, advances ranging from 10 to 100% in amount, on over 200 different articles.

In making the foregoing computation Mr. Kirkland would find advances to Chicago and points taking Chicago rates. The Western Trunk Line tariffs show 1,636 points taking the Chicago rates on shipments to St. Paul and Minneapolis. He did not multiply the number of advances to St. Paul by 1,636. Had he done so, instead of being six or seven thousand advances, there would be several million advances. In the same way, there are over 1,700 stations taking Kansas City rates; all of which are affected by advances to and from Kansas City. There are likewise a large number of stations taking the same rate as St. Louis, Chillicothe, Omaha, Peoria, Galveston, Houston, Winona, Duluth, etc. In the same way he only counted these advances once. The details from which these deductions have been made were all compiled in an exhibit showing the articles advanced, the amount, the rate, the tariff, etc. Some, of course, are of insignificant character. Others are exceedingly important. The gist of this evidence is simply to show that there have been large numbers of advances already permitted in Western Trunk Line, Trans-Missouri, and Southwestern Territories during the past year. You have already

made this Western Territory share a large burden of the increased tax forced upon it by the carriers. In addition to this, you have made these Western states bear a large portion of the advances granted to eastern railroads, since the bulk of our class traffic goes to and from eastern points, and is affected by the advances that have already been granted.

In the Eastern Advance Rate Case, Mr. Morris offered in evidence an elaborate compilation of concrete rates, attempting to prove that the general level of freight rates in Central Freight Association Territory was lower than in other portions of the country. The exhibit had the desired effect upon the minds of the Commission. The exhibit which he offered was simply a comparison of tariff rates without any handling of tonnage affected, and without any attempt to be exhaustive, or to summarize the situation as a whole; simply a series of rate comparisons, chiefly class rates, which are said to move less than 10% of the freight.

We have pursued the same policy as Mr. Morris, with the exception that our analysis is far more extensive and exhaustive in character. We have, in the Western case, selected 15 commodities on each of which there is ordinarily a large tonnage; also, on less than carload rates, we have selected a few representative articles. A comparison of class rates east and west would be meaningless because the articles are classified differently in the different classifications, and because there is a larger number of classes in the west than in the east.

Mr. Kirkland stated that while on many of the issues there are more points shown in the west than in the east; yet it should be noted that in all parts of the east, or in what is known as Central Freight Association Trunk Line, and New England Territories, the scale is very much the same. In the west it is very different, and an effort has here been made to show the rates in the various

sections of the west, or those portions of the west, known as Western Trunk Line, Trans-Missouri and Southwestern Territories. This exhibit shows in a remarkable manner how greatly the western rates already exceed the rates in effect in the Eastern Territory after the advances, which you have permitted in that section, had gone into effect.

ANALYSIS OF REPRESENTATIVE RAILROADS INCLUDED IN WETTLING'S LIST AFTER PLACING PERIODS ON SUBSTANTIALLY SAME BASIS.

Mr. U. G. Powell, chief statistician to the Nebraska State Railway Commission, made an exhaustive analysis of representative railroads included in Mr. Wettling's list of forty-one companies. The details of the work are set out in the exhibit and in the record.

Mr. Powell ascertained from Mr. Wettling, as soon as he could, the railroads that Wettling was going to cover in his exhibits. From this, Mr. Powell made a selection of six that he thought were representative of Mr. Wettling's list. He early reached the conclusion that it would be impossible to cover all the railroads in the territory, and he desired to make a test of the conclusions arrived at by Mr. Wettling.

In the case of the Santa Fe he deducted an excess book value of $102,000,000, as described by him on the stand. This was added to the property account without anything whatever being added to the property. This statement was unchallenged by parties to the case, and is presumptively correct. It was also testified to by Mr. Lauck.

Mr. Powell made one other change in the property accounts of the carriers that is of substantial importance. He found the Missouri, Kansas & Texas property account excessive, and placed it on substantially the average

value per mile of the Chicago, Burlington & Quincy, the Chicago, Milwaukee & St. Paul, the Chicago & North Western and the Rock Island railroads, at the beginning of the period, adding betterments and improvements which have been acquired by the company since that date. He arrived at a value of $35,000 per mile, which corresponds quite closely to the figure arrived at by Mr. Commissioner Harlan in *Texas R. R. Co. v. A., T. & S. F.*, reported in 20 I. C. C. at page 463.

By placing the depreciation accounts upon the same basis before, and after, the change of rules which occurred June 30, 1907, and by deducting from property such additions and betterments as have been built out of surplus, Mr. Powell arrives at the following average rate of return upon property investment of his six roads, from the year 1899 to 1914 inclusive:

	Excluding additions and betterments	Including additions and betterments
1899	6.31	5.37
1900	6.91	6.03
1901	7.20	5.98
1902	7.93	6.53
1903	8.13	6.68
1904	7.45	5.98
1905	7.42	5.90
1906	8.50	6.73
Avg. 8 years	7.51	6.13
1907	8.88	6.84
1908	7.79	5.97
1909	8.91	6.67
1910	8.27	6.21
1911	8.35	6.34
1912	7.41	5.54
1913	7.93	6.06
1914	7.02	5.38
Avg. 8 years	8.02	6.06
Avg. 16 years	7.79	6.11

It will be noted that Mr. Wettling's division of the periods serve several purposes. In the first place, it threw

the panic year, 1908, into the latter period, and the extremely prosperous year, 1907, into the average of the first period. This division also threw the burden of the change of accounts, which added depreciation accounts to expenses into the second period, and also the additions and betterments out of surplus to property, into the second period. Mr. Powell has carried the division back one year, making the groups cover 1899 to 1906 inclusive, and 1907 to 1914 inclusive. This shows, on the basis we have described, that the average rate of return on property during the second period is greater than during the first period.

The foregoing table covers the following railroads:

ROADS				
A., T. & S. F. Ry. Co.	11,304.21	miles	owned	1914
C., B. & Q. R. R. Co.	8,942.46	"	"	"
C., M. & St. P. Ry. Co.	9,578.48	"	"	"
C. & N. W. Ry. Co.	7,945.50	"	"	"
C., R. I. & P. Ry. Co.	7,631.87	"	"	"
M., K. & T. Ry. Co.	3,604.47	"	"	"
Total	49,006.99			

While the railroads selected by Mr. Powell are not representative of the Northwestern group, they do represent the list of railroads Mr. Wettling selected.

The substance of this presentation is to the effect that the exhibits introduced by the carriers' experts do not correctly show the true comparisons between the period since 1907 when the present accounting rule of the Interstate Commerce Commission became effective, and the eight-year period prior thereto; because in the prior period a very large amount of additions and betterments were paid out of surplus and charged to profit and loss, and in the latter period were charged to property investment.

The methods used by the carriers in the prior period had the effect of holding down or shrinking the property

investment account and consequently showing a greater net operating income in terms of percentage. Under the Interstate Commerce Commission's accounting system obtaining in the latter period, this situation or method is completely reversed.

The railroad experts made no attempt to harmonize or recast their figures as between the two periods set up by them in their exhibits, and as a consequence, or result of the different accounting methods used in the two periods (4835), the figures and exhibits so presented by them failed to disclose accurately and correctly the true condition as between the said periods.

The special study made of six roads, to-wit: Santa Fe, Burlington, Milwaukee, North Western, Rock Island, and the Katy, which own 49,006 miles of road, or over 50 per cent of the mileage of the roads involved in this controversy, shows, that, in the period 1898 to 1906, $86,220,421.82 was the combined surplus earnings of said roads used in additions and betterments not shown in the property investment account; and that, in the period 1907 to 1914, not only was surplus so applied, charged to property investment account, but that the carriers in addition charged off as a part of operating expense an arbitrary depreciation charge of $67,098,737.00.

While this amount is deducted arbitrarily by the carriers from their income it is not carried on their books as an actual liability against the assets of the companies. This is speaking as to these six railroads.

In substance the study shows that the six roads in question had a net income over and above all expenses sufficient to pay an average return of 7.51 per cent in the first eight-year period, and 8.02 per cent in the last eight-year period on all property investment excluding so much thereof as was paid for out of surplus earnings; and an average return of 6.13 per cent for the first eight-year

period and 6.06 per cent for the last eight-year period shown by the carriers' own balance sheet.

The net surplus of the six roads in question after paying all operating expenses, taxes, interest and dividends, in the first eight-year period was $190,681,161.60, and in the second period $228,412,885.69, or a total for the entire period of $419,094,047.29. (tr. 4837.)

1914, A YEAR OF DEPRESSION.

The world-wide financial stringency in 1913, which was followed by a general depression in business throughout the United States in the fiscal year 1914, is common knowledge. This was specifically referred to by the Commission in its decision in the *Five Per Cent Case,* 31 I. C. C., 419; also on page 424 in the same decision. The carriers frankly conceded the same situation in their testimony in this proceeding. The year 1912 was a year of expansion in general business, upon a pronounced scale along many lines. The year 1913 was a striking contrast with 1912. The situation was acute in Europe. Large industrials, like the General Electric, were obliged to pay exceedingly high rates—as much as 6¼% for $8,000,000 upon a nine months' maturity. By April 29th the municipal bond market gave evidence of rapidly increasing stringency. New York City was obliged to pay 4½% for $45,000,000 long term bonds, against previous issues of 4% and 4¼% in preceding years. Over fifteen and one-half million of municipal bond offerings proved unsuccessful in April, nineteen millions in May, twenty-five and one-half millions in June, and fifteen millions in July. In June Tennessee failed to place 4% forty year refunding bonds; and in order to provide for maturing 3's, was obliged to issue $9,401,000 5% notes, which were sold on a 7% basis.

Internationally, disturbances commenced to assume serious proportions. The Mexican situation became chaotic with the overthrow of the Madero government. In

Europe, the Balkan disturbances commenced, and the period of conflict occupied the first nine months of the year, upsetting the international money markets. The enormous increase in the armaments of France and Germany produced distrust which was disconcerting, and which helped to produce a world period of depression and crisis.

The heavy governmental borrowings forced such a stringency in loanable funds that London bankers agreed to hold up all corporate financing.

The market prices of Mexican investments suffered severe losses.

The crops of a few staples during the summer of 1913 suffered severely by widespread drought. The situation is briefly summarized in the following table:

	Shortage compared with 1912
Corn	677,758,000 bushels
Oats	296,569,000 bushels
Potatoes	89,122,000 bushels

A general liquidation in the stock markets continued pretty much throughout the year. Industrial stocks and railway stocks were both similarly affected.

The first half of 1914 was a dismal year for general business. War in Eastern Europe did not break out until August; but, preceding this cataclysm, the industrial situation kept continually growing worse. The Mexican situation, upon several occasions, threatened complications of a most disastrous nature.

From the high points in 1912, up to the closing of the New York Stock Exchange, the two averages of railway and industrial stocks, kept daily by the Wall Street Journal, registered a decline of nearly thirty per cent each, conclusively proving that all business has been going through one of those depressions which have occurred, at

intervals of ten or twenty years, during the past one hundred years.

These facts which we have recited, are not related, with particular materiality, to the present case, except as they are matters of common knowledge, with which all are generally acquainted. In our discussion of the issues in this case, the fact that the year 1914 was a year of general depression throughout the world must be kept in mind. It was testified to by Mr. Norton, who detailed the financial stringency. Mr. Chambers mentioned it (tr. 13662); also Mr. Wallace (tr. 4368).

During the cross-examination of Mr. Wade, he said:

> "If you take the year 1914, you are not fair in making the comparison, because in the first place, four months of that year you were in the midst of a panic and the other eight you were in a depression" (tr. 399).

Mr. Bush, president of the Missouri Pacific, referred to the same fact:

> "Mr. Barrow: To what condition do you attribute the falling off in your revenues, Mr. Bush, freight rates or depression?
>
> "Mr. Bush: I attribute the falling off in our gross revenue, of course, to the general depression which has prevailed throughout that section, which has affected not only our road, but all of those roads" (tr. 524).

It was so stated by the Commission, in its decision, as referred to above. It was also admitted by carriers in this proceeding. The general depression in all industry was evidenced by witnesses engaged in all lines of business, who offered evidence in the case.

It is unfair to accept that year as representative. For these reasons, we will have occasion to refer more frequently to the year 1913.

TENDENCY OF INTEREST RATES FOR UNITED STATES. WESTERN DISTRICT.

ATCHISON, TOPEKA & SANTA FE RY.
CHICAGO, BURLINGTON & QUINCY R. R.

CHICAGO & NORTH WESTERN RY.
CHICAGO, MILWAUKEE & ST. PAUL RY.

1890-1914

Year	All U. S.		Western District	A., T. & S. F.	C., B. & Q. R. R.	C. & N. W.	C., M. & St. P.
	(a)	(b)	(c)	(d)	(d)	(d)	(d)
1890	4.84	4.84	4.79	3.31	5.20	5.54	5.84
1891	5.03	4.54	4.55	3.38	5.03	5.24	5.83
1892	5.61	4.75	4.65	3.60	5.15	5.34	5.81
1893	4.79	4.79	4.75	3.60	5.21	5.29	5.74
1894	4.72	4.72	4.79	3.64	5.25	5.28	5.57
1895	4.68	4.69	4.79	3.88	5.17	5.32	5.66
1896	4.67	4.67	4.67	2.26	5.16	5.37	5.65
1897	4.56	4.70	4.54	2.70	5.22	5.36	5.66
1898	4.41	4.53	4.39	2.89	5.23	5.26	5.53
1899	4.42	4.55	4.52	2.85	5.15	5.19	5.40
1900	4.33	4.48	4.48	2.85	4.96	4.93	5.43
1901	4.34	4.46	4.46	3.99	5.06	4.85	5.23
1902	4.34	4.49	4.53	3.74	4.76	4.85	5.18
1903	4.28	4.41	4.50	3.98	4.77	4.79	5.14
1904	4.18	4.33	4.47	3.98	4.03	5.12	5.14
1905	4.16	4.28	4.41	3.94	4.33	5.12	5.13
1906	4.05	4.15	4.36	3.89	4.22	5.14	5.02
1907	4.11	3.95	4.00	4.12	4.33	5.09	5.06
1908	4.14	3.91	3.99	3.96	3.90	5.10	5.05
1909	4.08	3.90	3.88	4.34	3.90	4.73	5.06
1910	4.09	3.87	3.82	3.94	4.32	4.95	4.50
1911	4.07	3.82	3.68	3.84	4.05	4.57	4.34
1912	4.11	3.85	3.84	3.97	4.29	4.37	3.73
1913	4.19	3.89	3.86	4.24	4.33	4.41	3.64
1914				4.03	4.18	4.30	3.98

(a) Rate for years 1890 to and including 1907 is as given in the Annual Statistical Reports of the Interstate Commerce Commission. I. C. C. reports prior to 1908 do not give amount of Funded Debt held in treasury, but since that date such figures are given. We have recompiled the Interest Rate since 1908 deducting amount held in treasury for 1908, 1909 and 1910 and amount held in treasury and in sinking or other funds for 1911, 1912 and 1913 from total Funded Debt as given in I. C. C. Reports and dividing resulting figure into amount for Interest accrued.

(b) Rate for entire period computed from Funded Debt and Interest totals given in Annual Statistical Reports of the Interstate Commerce Commission.

(c) Same as (b), except Funded Debt and Interest for years 1890 to 1910, inclusive, is the sum total of that shown for Groups VI, VII, VIII, IX andX.

(d) Rate computed from Funded Debt, using net figure after deduction of bonds held in treasury, and Interest totals as given in Annual Reports of the Interstate Commerce Commission. The amount of debt held in the treasury was taken from Poor's Manuals, and checked, where possible, with Annual Reports of Roads to their stockholders.

NOTE:—Figures for United States and Western District for 1913 are based on returns of companies having operating revenues exceeding $1,000,000.

Authority: Basic figures from Annual Statistical Reports of the Interstate Commerce Commission.

EXCESSIVE DEPRECIATION CHARGES.

Depreciation charges have been excessive on some railroads, and deficient on others. However inadequate depreciation charges may be, yet they can be a complete duplication of other charges; in which case the depreciation is fully cared for elsewhere in the expense account. Can one be justified in finding that depreciation charges, as a whole in this territory, have been too low up to recent years? If it were true that the carriers were unable to take care of this phase of their accounting out of any other item in their accounts than under depreciation, then it would be completely established by the record in this case that the depreciation charges, prior to 1908, were inadequate; and it would also be true that they are inadequate as to some carriers today, and more than adequate as to others. As to the net result, a compilation, or review, of each important railroad would have to be made.

But we find absolutely the opposite to be true; for depreciation charges can be an entire duplication of other items in the account, and can be, and have been, taken care of under other headings in the expense accounts. Charges to depreciation of one-half of one per cent can be complete duplication of other portions of expense accounts. This was frankly conceded by Mr. Wettling, a witness offered on behalf of all of the defendant carriers. This concession made by Mr. Wettling is true and correct. The admission made by Mr. Wettling was further confirmed by such officials as Mr. Bush of the Missouri Pacific, and others.

The manner in which this has been made possible in the past, we will attempt to describe briefly, using the language of the witness from time to time.

A carrier owning a large number of wooden cars as they grow old, can practically dismantle them, rebuilding

them with steel under frames, providing the company with a new equipment almost in its entirety, and charging practically all of the cost except the underframe to operating expenses under repairs. Mr. Bush testified that if a company rebuilds a large number of cars during a given year, it can more than take care of the depreciation on its equipment for that particular year. Assuming the life of a thousand cars to be 20 years without much repairing, they can be repaired and rebuilt over and over in the shops of the company and last for several generations. This is a constant practice of the companies.

Assuming that the depreciation on a certain number of cars would ordinarily amount to $50,000; if a company, in fact, spent more than $50,000 out of repairs in rebuilding its cars in any given year, it has more than taken care of the so-called depreciation. Now if that company, in addition to these repairs and rebuilding, adds an account known as Depreciation Charge then it simply doubles up operating expenses as a bookkeeping proposition. What we have said as to freight cars applies also to passenger cars and locomotives.

These facts constitute the chief reason why some of the carriers have protested so bitterly in the past, and so constantly, against the addition of the depreciation charge in the accounts, because that factor is already taken care of elsewhere in their accounts. Different companies handle their accounts according to different methods. In some instances, a charge of one-half of one per cent to depreciation, as Mr. Wettling says, might constitute an entire duplication. It is very evident from the records of the carriers that this has occurred, in the case of several railroad companies.

BURLINGTON RAILROAD.

The following extract from the testimony of Mr. Sturgis in the 1910 case was offered in the present proceeding:

"Mr. Dawes: Now, Mr. Sturgis, table Exhibit No. 4 purports to be operating revenue and expenses reclassified to show divisions as now provided in the present Interstate Commerce Commission's classification and excluding amounts expended for betterments and amounts carried to depreciation and other funds. That table is to be read in connection with 4-A and 4-B following is it not?

"Mr. Sturgis: Yes.

"Mr. Dawes: 4-A, as I understand it, will show the amounts which were deducted from the amounts stated in Exhibit No. 4 in order to conform with the reclassification method adopted by the Interstate Commerce Commission?

"Mr. Sturgis: No; that is not quite right. They are not deducted from the figures shown in Exhibit No. 4, but from the figures returned to the Interstate Commerce Commission in the annual reports, and if I may state the object of that modification, it is this: The classification of operating expenses has changed during the ten years covered by this statement. We had our own classification at one time, and we had the interstate at another time, and effective July 1, 1907, the Interstate Commerce Commission changed its classification, the effect of which was to take out of operating expenses a considerable number of items and some considerable amounts previously included in operating expenses. It also to some extent affected the earnings. The classification also affected earnings to some extent. That was almost entirely brought about by the classification that went into effect July 1, 1907, but there was some slight effect still felt during the following year, because there was another change, a small one or minor one, in the classification taking effect July 1, 1908. The object was to eliminate from this statement everything that prevented a fair and clear comparison of the operating figures for those 10 years, and Exhibit 4-A shows what was deducted on account of the changes in classification.

"Mr. Dawes: It shows the amount deducted each year?

"Mr. Sturgis: Each year under the different

items. Exhibit 4-B takes out of the operating classification everything that was added there that was not a recognized operating expense at the beginning of the period—

"Mr. Atwood: Just to follow you there, Exhibit No. 4 is gotten up in just the way you always did keep the accounts?

"Mr. Sturgis: No.

"Mr. Atwood: That is corrected, is it?

"Mr. Sturgis: That is corrected so that every figure on that page is on a uniform basis.

"Mr. Atwood: Under the new rules?

"Mr. Sturgis: Under the new rules.

"Mr. Dawes: And A and B show in detail the changes and corrections made to produce that uniform basis which enables you gentlemen to look at these exhibits and state just what is taken out of them and whether you think they are rightly or wrongly taken out.

"Mr. Sturgis: Now Exhibit 4-B shows what was taken out that did not strictly belong to operating expenses, according to the understanding of operating expenses at the beginning of the period. For instance, you will see by reference to column 3 that depreciation on equipment began with us in 1905. That has all been eliminated from the figures before showing them on Exhibit No. 4, as otherwise the operating expenses would show an improper per cent of increase.

"Mr. Thorne: Do you understand the depreciation charges are not or are included on Table No. 4?

"Mr. Sturgis: They are not.

"Mr. Atwood: Otherwise those years after 1905 would be out of line with what went before.

"Mr. Sturgis: That is a correct understanding on your part.

"Mr. Dawes: The effect of making these deductions, as I understand it, is rather against the railroad, because the operating ratio would be somewhat lower if these things had been left in.

"Mr. Sturgis: It works both ways. The items

deducted on 4-A are items that the Interstate Commerce Commission, under its new classification, left out of operating expenses, and therefore if they had been left in the increase from 1901 to 1910 would not have been shown correctly large; in other words, the tendency of the change by the Interstate Commerce Commission is to destroy the value of their figures in comparisons of this kind. Now, this is no criticism on my part, the leaving out of these items; I had a good deal to do with leaving out a good many of them, and believe they should be left out; but I want to point out that they reduced the operating ratio improperly as compared with what it was in 1901. But from 1907 it is all right. Now, the other exhibit 4-B shows items that worked the other way. If they had been left in, then our figures would have shown an abnormal increase.

"Mr. Dawes: But as the result of both deductions the figures are shown on the same basis for the period which they cover.

"Mr. Sturgis: Yes.

"Mr. Dawes: And all this deduction is made necessary by the new methods of accounting established by the Commission, which was different than as practiced by our railroad up to that time.

"Mr. Sturgis: Yes.

"Mr. Lyon: Do I understand you to say that owing to this change in the method of keeping these accounts that a comparison of the operating ratio of 1910 with 1901, for instance, is not fair and does not represent the true status?

"Mr. Sturgis: It is not a question of veracity at all.

"Mr. Lyon: I understand; I just want to know—

"Mr. Sturgis: If the operating ratio of the Chicago, Burlington & Quincy Railroad is taken from the published reports of the Interstate Commerce Commission for the years 1910 and 1901, the percentage of increase will not be correct, and that is brought about by the change in the classification of operating expenses.

"Mr. Lyon: The question I wanted to put to you

was, Will the operating ratio in 1910 appear relatively too great or relatively too small?

"Mr. Sturgis: It will appear relatively too small by between 2 and 3%.

"Mr. Lyon: I have been informed directly to the contrary, and I wanted to know.

"Mr. Atwood: In 1901 he said it would be smaller by 2 or 3% than it should be.

"Mr. Lyon: Would it be smaller in 1901?

"Mr. Sturgis: The comparison of 1910—

"Mr. Dawes: What would the operating ratio in 1901 be, adopting the accounting methods now in vogue? Would it be greater than has been shown, or less?

"Mr. Sturgis: Smaller.

"Commissioner Clark: It is stated on this exhibit in plain English that it makes the operating ratio in the years subsequent to 1907 less than if the old classification had been in effect.

"Mr. Lyon: That is the reason I asked the question, because I am informed directly to the contrary.

"Mr. Sturgis: I think that is easily explained. The items taken out owing to the change in the classification, the putting of certain items out of operating expenses into other income and so forth, from outside operations—the statisticians will understand my language—makes the operating expense ratio too low in 1910, lower than it would have appeared in comparison with 1901; but the addition of depreciation, for instance, would tend to increase the operating ratio. That is taken care of by me in Exhibit 4-B.

"Mr. Lyon: Then you are speaking for your road alone in the making of that statement?

"Mr. Sturgis: No; I believe that to a very large extent it would apply to all the roads.

"Mr. Lyon: Our statisticians differ directly with that, but I want to get it accurately.

"Mr. Sturgis: I do not think with that latter statement they do differ.

"Mr. Lyon: They say with some roads, and pos-

sibly this is one of them, that is strictly true. But with the country at large that is a fact.

"Mr. Dawes: As to our road, of course. The other conditions you do not undertake to testify with reference to?

"Mr. Sturgis: No.

"Mr. Dawes: Your answer, then, will be confined to the conditions as they appear from our own books and statistics, Mr. Sturgis?

"Mr. Sturgis: Yes." Pages 937-938-939-940, Evidence in Matter of Proposed Advances in Freight Rates, 61st Congressional Report, 1910-1911, Senate Vol. 48.

The tables to which reference is made show excessive depreciation charges (frankly conceded by Mr. Sturgis), amounting to several millions; these exhibits are given in the Abstract.

ATCHISON, TOPEKA & SANTA FE.

In connection with the preceding testimony of Mr. Sturgis, we call your attention to the Atchison, Topeka & Santa Fe Co. operations since the installation of the depreciation charge. Turn to Powell Exhibit No. 2. It will be noted that the repairs, entirely exclusive of renewals and depreciation, have averaged since 1908 more than repairs, renewals and depreciation, per locomotive, amounted to altogether for any preceding year. The same is true of repairs to passenger cars. The same thing is true of repairs to freight cars, with only one exception, 1907. The depreciation charge of the Santa Fe is evidently an entire duplication; and in fact their repairs much more than take care of all factors involved. The high stage of efficiency of the North Western is well known to the traveling and shipping public.

The undisputed evidence in the case is that this company not only maintains, but has been improving, its property out of operating expenses during the past few

years, raising the property to a higher standard. Mr. Chambers' evidence on this subject was not denied by rebuttal testimony; nor was it even seriously questioned on cross-examination. We have used the North Western as a standard in the territory, and have made extended analyses of its accounts, which are somewhat extensively described in the record. This company has always been noted for its high efficiency; it has not gone to the extreme during the past few years that other companies have, because the North Western property was already in splendid condition.

Last year the repairs, alone, entirely aside from its charges to depreciation and renewals, on the Santa Fe, averaged $3,506.50 per locomotive, while all charges to repairs, renewals and depreciation combined, on the North Western, averaged only $2,640.00, and the previous year it was $2,722, these two years being the highest in the entire history of the North Western. Clearly, the Santa Fe has been duplicating some charges. From this it is evident that on the Santa Fe, its repairs alone for locomotives, amounting to $6,451, 976, in 1914, was more than enough to take care of all factors—repairs, renewals, and depreciation.

On passenger cars the repairs, alone, on the Santa Fe, amounted to more than six million dollars, averaging $738 per car. On the North Western the repairs, renewals and depreciation, all combined, only amounted to $565 per passenger car. The Santa Fe total passenger receipts were approximately 16% greater than those of the North Western; while its repairs, alone, of passenger cars, was 31% greater than repairs, renewals and depreciation, combined, on the North Western.

The repairs alone per freight car on the Santa Fe, averaged $72.85 per car. This was greater than the average on the North Western, for repairs, renewals and depreciation combined, for any year prior to 1913, excepting

only 1906, and 1907. During those two years on the North Western the average reached $83.65 and $84.13, being a jump of over 43% over any preceding year. That remarkable situation was accounted for by reason of the fact that the North Western that year bought $5,000,000 worth of new freight cars, and this increased immensely the replacement and renewal account of those two years, making them abnormal, as described. The next abnormal increase on the North Western freight car maintenance occurred in 1913 and 1914, when an increase of 30% occurred in repairs, alone, per car, in a single year. These conditions were extensively discussed in Mr. Chambers' testimony. The uncontradicted evidence is that the North Western has not only been maintaining, but it has been improving, its car equipment out of operating expenses during the past two years; and yet the Santa Fe maintenance was 20% greater, per freight car, last year than that of the North Western.

In actual practice, and in the face of theories, we find that the adequacy, or inadequacy, of the depreciation charges for a given railroad depend upon the amounts charged to repairs.

In the light of such facts as those, the worthless character of any average depreciation as being adequate, or inadequate, for a given group of railroads, consolidated, is certainly apparent. You must analyze the repair accounts of each railroad in connection with its depreciation and renewal charges.

ARGUMENT.

Railway companies that are honestly and intelligently constructed, financed and managed, are entitled to a reasonable return on their property over and above all legitimate operating expenses; and their securities should be attractive investments. Justice entitles them to this, and the interests of the public demand it.

Our task is to see whether the Western railroads meet these requirements.

ELEMENTARY PRINCIPLES.

Before entering upon an analysis of these railroads, a few elementary rules will be mentioned, that must always be considered, when analyzing financial statistics of railroad companies.

PERIODICAL RISE AND FALL IN PROSPERITY OF ANY BUSINESS.

First: There is always a wave, an ebb and flow, in the prosperity of all industries, entirely aside from periods of severe financial depression. This is true today, always has been true, and always will be true. Proper allowance must be made for abnormal years, whether extremely prosperous or extremely poor. Any review covering a few months, or a few years, is entirely inadequate, and is an absurd method. A broad perspective can only be obtained by an extended review.

PANICS.

Second: Proper allowance must be made for panics, and for years of depression prevailing throughout business generally.

NEW CONSTRUCTION.

Third: New construction rarely earns, during the first few years of its life, the same amount as old, well seasoned properties.

Fourth: New construction not only affects a decline in the average rate of return, because of its light earnings during the early years of its life; but it also affects a large increase in actual operating expenses for materials and supplies, while the construction is in progress, by reason of the accounting rules relative to renewals, or replacements, thereby automatically reducing net revenues, or surplus earnings, while the construction is going on regardless of the prosperity of the company.

Fifth: New construction affects another increase in operating expenses, because large portions of the labor costs connected with additions and betterments, can be charged to operating expenses. In the case of ballast, rails, ties, roadway and track, the labor charges are generally greater than all other charges put together.

CHANGES IN ACCOUNTING RULES.

Sixth: A comparison of the resulting net revenues, when there is a substantial change in the accounting rules as to basic factors, like property investment, or operating expenses, is, of course, an absolutely false and misleading representation of the tendency of net revenues.

CHANGES IN MAINTENANCE STANDARDS.

Seventh: A comparison of the resulting net revenues, when there is a substantial change in the maintenance standard is absolutely fallacious, as any indication whatever of the tendency in the net revenues. (Whether the resulting net revenues are adequate, in themselves, presents another issue; and, as to this issue, book value, or

the so-called property investment, is not the basis.) No comparison of tendencies is justifiable until the controlling factors are placed upon substantially the same basis.

BOOK VALUE.

Eighth: Care must be taken to distinguish between an analysis of the adequacy of a net return, in and of itself, and the tendency in net returns over a period of years. Different principles and different bases are used in the one case and in the other.

Return on book value, or the so-called property investment, is no test as to the adequacy of the return itself, as this Commission has repeatedly held that the said book cost of railroad properties is no indication of their original cost or of their present value.

Book value can be fairly used for general comparative purposes as to the profits of a company, and its justification for an advance in freight rates, providing: (a) the important factors in the accounts are placed upon substantially the same basis during the years compared; and (b) providing you do not include in the said book value the cost of items upon which the company is not entitled to rely as a justification for an advance in freight rates.

WEAK PROPERTY NOT CORRECT STANDARD.

Ninth: A weak property cannot be accepted as a standard for testing the adequacy of revenues in any industry, unless that class of properties handles the bulk of the business. If the larger portion of the business in any given territory is handled by successful properties, a representative company of that class must be adopted as the standard, if progress is to be made; otherwise you place a premium upon inefficiency; you adopt a standard that prevails in no other business on the face of the earth.

SUBSIDIARY LINES NOT STANDARD.

Tenth: Subsidiary lines, or portions of systems, should not be accepted as any criteria of conditions. The parent company, or the system, must be the one considered.

MISMANAGEMENT.

Eleventh: The public is entitled to demand of our railroad companies that they shall meet the reasonable, legitimate requirements of modern finance, and operation; and upon their failure to do so, they are not entitled to the return received by those companies which do meet those requirements.

A company is not entitled to recoup itself out of advanced freight rates, for losses due to mismanagement of the property, or through financial, or other blunders, on the part of those in control of the company.

Any general averages including the rate of earnings of companies guilty of mismanagement, or high finance, cannot be accepted as a basis for advancing freight rates.

CAPITALIZING PERMANENT IMPROVEMENTS BUILT OUT OF EARNINGS.

Twelfth: Improvements built out of current earnings, charged either to operating expenses or surplus, should not be capitalized; but this Commission has no power to prevent them from being so capitalized.

Improvements built out of earnings in the past, and capitalized, do not constitute a justification for an advance in freight rates.

A company is not entitled to advanced freight rates for the purpose of creating a surplus in the future, over and above expenses, and a reasonable return on the fair value of the property, with which to build improvements of a permanent character; whether the same are to be charged to operating expenses, or to surplus, or to capital.

A few suggestions in support of the foregoing principles will be made at this time. Most of the propositions we have suggested are so elementary as not to need discussion. All of them are well established by the decisions of this Commission and the Courts, but a few deserve special consideration because of their vital connection with some phases of the present investigation.

INTERCORPORATE RELATIONS.

It is necessary to consider system figures, and not those of a subsidiary, in making an analysis of financial returns. Where time permitted us in our work, we have tested the validity of a showing for a given company with the system figures. Where such are not given in our exhibits, we frankly state that system figures should be used to find the net result in the entire territory served by such system, and under the circumstances surrounding the said railroad. The arbitrary division of receipts and earnings between companies having intercorporate relationships, common officers, etc., is a notorious source of possible misrepresentation, which may be either intentional or otherwise.

A striking example of the possibilities of this character was given in the testimony of an exhibit of Mr. Chambers, who showed that the Dubuque & Sioux City maintenance, as reported to the Iowa Railroad Commission, amounted to $3,405 per car per year, being enough to buy three or four new cars per year, as compared with the maintenance on the Burlington of $114; the maintenance per locomotive on the Dubuque & Sioux City amounted to over $10,000, as compared with $3,200 on the Burlington. If the Dubuque & Sioux City had the same number of cars and locomotives in proportion to its traffic as the Burlington, then the maintenance per freight car last year on that railroad would have been 72% greater and the main-

tenance per locomotive 60% greater than that of the Burlington. (Chambers' Exhibit 1, page 21.)

The Commission itself has abandoned groupings in the United States by boundaries, and has adopted the grouping by systems.

The railways in the Eastern case used system figures. The Commission in its 1910 decision adopted system figures. The possibilities of arbitrary separation of earnings and expenses, misleading in effect, are apparent to all.

The railroads in Official Classification Territory used system figures in presenting their exhibits to the Commission.

The following table constitutes a concrete demonstration of the fallacious deductions that can be made from figures, using the Sunset Central lines instead of the operations and earnings of the parent company, the Southern Pacific Company. We have used all the Sunset Central lines named in Mr. Wettling's list of railroads, for which the data could be secured from the preliminary abstract of the Interstate Commerce Commission for the year ending June 30, 1913.

COMPARISON OF THE OPERATING RATIOS OF THE SOUTHERN PACIFIC WITH ITS SUBSIDIARIES, THE SUNSET CENTRAL LINES (Reported in the Preliminary Abstract of Interstate Commerce Commission), WHICH WERE USED BY MR. WETTLING, FOR THE YEAR ENDED JUNE 30, 1913.

	Sunset Central Lines	Southern Pacific Co.
Morgan's Louisiana & Texas........	84.19	57.35
Louisiana Western..................	67.94	
Texas & New Orleans..............	88.03	
Galveston, Harrisburg & San Antonio	79.33	
Houston & Texas Central...........	80.30	
Houston East & West Texas.........	75.50	

Authority: I. C. C. Preliminary Abstract of Statistics of Common Carriers for year ended June 30, 1913, covering roads having more than $1,000,000 revenues.

It will be noted that the operating ratio of the Southern Pacific is from 15 to 50% less than its own subsidiary.

The following table again illustrates the same proposition. While the parent company, reflecting all factors going into the system, is able to earn 9.62%, two of its subsidiaries are earning deficits and two others are earning less than 2% on their capitalization.

COMPARISON OF THE RATIOS OF NET CORPORATE INCOME TO CAPITAL STOCK OUTSTANDING OF THE SOUTHERN PACIFIC WITH ITS SUBSIDARIES, THE SUNSET CENTRAL LINES (Being reported in the Preliminary Abstract of Interstate Commerce Commission covering roads having revenues exceeding $1,000,000), WHICH WERE USED BY MR. WETTLING FOR THE YEAR ENDED JUNE 30, 1913.

	Sunset Central Lines	Southern Pacific Co.
Morgan's Louisiana & Texas.....	Déficit	
Louisiana Western	17.84%	9.62%
Texas & New Orleans............	Deficit	
Galveston, Harrisburg & San Antonio	Deficit	
Houston & Texas Central..........	0.23%	
Houston East & West Texas......	1.55%	

A person cannot reach the conclusion that those subsidiaries in themselves were unprofitable to the system, because of the figures that we have just stated. The best demonstration of the accuracy of this statement is the experience had by the Northern Pacific Railroad Company a number of years ago, when there was a factional dispute on between the directors and stockholders.

The stockholders of the Northern Pacific severely criticized the policy of the board of directors in purchasing and constructing the branch lines. A committee was appointed by the stockholders and by the board of directors.

Elaborate investigations on the wisdom of the branch line policy were made. Finally the directors made a formal statement to the stockholders, in which a careful analytical discussion was given in regard to the proper accounting for earnings and expenses between the parent company and its subsidiaries. This report completely demonstrates the fallacy of apportioning earnings on the mile per rate basis. It shows further that if the branch lines are credited with 60% of the earnings from the traffic originating on the branch lines, in each instance the branch line was shown to be self-supporting without seriously affecting the net revenue or net rate of return to the main line.

This report of the Northern Pacific board of directors is a conclusive demonstration of the necessity to consider system figures. Extended extracts of the report were introduced in record in this case and are given in the abstract. The Railroad Securities Commission, appointed by the President of the United States, took occasion to make special mention of this same proposition in the following words:

> "Where a railroad controls the operations of another road by the ownership of a majority of its stock, there is constant danger that the minority stockholders will not be fairly treated. The road thus purchased has become part of a large system, and is operated by the representatives of the whole system. It is almost certain that the advantage of the whole will be preferred to the separate interests of the part in matters of operation, traffic and finance.
>
> "Again, the existence of two or more companies under the same management, having separate organizations but united control, invites the concealment of financial transactions by the shifting of earnings from one company to another."
>
> (Report of the Railroad Securities Commission to the President, 1911, p. 23.)

ADDITIONS AND IMPROVEMENTS OUT OF SURPLUS EARNINGS SHOULD NOT BE CAPITALIZED.

It is unjust to compel the public to pay a reasonable return upon the investment of some people in railroad property, then compel the public to build additions, betterments and improvements on that property; and then compel the public to pay a return on what it has built. We want these betterments, improvements and additions. The public needs require them, but we want the railroad people to build them and we will pay a return upon their value. If we build them we should own them. No Court or Commission will ever permanently force upon the American people the obligation to build railroad property for private citizens, and then pay those private citizens a return upon what the public constructs. That is just precisely what the railroad companies of this Western district are demanding. There is the crux of the whole fight. They are building additions and betterments, improving their properties, raising them to a higher standard, and charging the same to operating expenses or surplus earnings.

If you are a railroad official, your problem is to find out how to get the largest possible returns for the stockholders now and in future years. The answers to most of these perplexing questions which we are discussing are very simple. Charge just as high rates as you can so as not to interfere with the general movement of traffic. Do not pay over 4.5% on your debts and pay just as much less as possible. Make the public raise your property to a higher standard. Make the public build betterments, improvements and additions and charge them to operating expenses or to surplus. Issue just as few stocks as possible. The more the property is built out of operating expenses, surplus income, or bonds, the more profits will inure to the stockholders.

Precisely the same results are accomplished whether you build improvements and charge to operating ex-

penses, or surplus. You are compelling the traffic in one year to bear the burden of an improvement, whose cost should be spread over the life of the improvement. If the owners of a railroad are receiving an adequate return upon their property, it is axiomatic that they should not have, in addition to such return, a surplus for the purpose of building improvements and additions, and at the same time have a return upon such improvements and additions built out of surplus. Either they should be denied a return on such construction out of surplus; or else they should be denied the surplus. Both certainly cannot be permitted to continue.

REPRESENTATIVE RAILROADS.

There is an apparent decline in ratio in net operating income to book value on a few of the western railroads, a notable example of which is the North Western Railway. If the accounting rules, and new construction, throughout a period of years remain substantially constant, there would be occasion for a showing of that character to have great weight in the mind of a disinterested party.

All persons acquainted with the facts freely concede there have been changes of the character to which we have referred. The difference in opinion comes from the weight to be attached to these changes. Without citing the effect of the changes, and without any intent to investigate and analyze the facts from which such a deduction might be made, the carriers boldly assert that these changes have had no substantial effect.

In former cases before the Commission, we have attempted to show the large importance of these factors, but because of lack of facilities, we have been unable to make a critical analysis of the situation.

It is possible, of course, that conditions may be entirely different in the east and the west, and even if we had

been able to make the analysis in the east, it might have resulted differently from what we find in the west.

In this Western Case we have undertaken to make a somewhat extensive analysis of the situation as to the effect of these changes. This task is complicated tremendously for several reasons; the many important changes in accounting during the reconstruction period, through which the carriers have been passing; the enormous amount of new construction; the raising of the standard of their maintenance of properties; extending their lines into new territories in the northwest and southwest; and the intercorporate relationships with other companies.

We quickly found it would be impossible to make even an approach at a careful analysis of the financial condition of all the railroads in the territory. We thought it would be wiser to make a superficial analysis of all the railroads, presenting their surface figures, as given in their reports, without making any revision because of changes in the accounting rules of the Commission, or the policies of the carriers, supplemented by a somewhat more extended analysis of a few representative companies in the Northwestern group of states, where the bulk of the advances occur, selecting one representative typical carrier, for an intensive study of these various factors, and what effect they have had.

A somewhat puzzling situation gradually becomes clear as a result of this analysis. What appears to be a strange inconsistency is found simply to be the result of a change in bookkeeping and a change in the amount of construction that is going on. It was difficult to explain why such bookkeeping results were obtainable in spite of the fact that the credit of these companies was improving; they were raising the standard of maintenance of their properties, and their gross earnings and net earnings sur-

passed any in their former history. When a proper analysis is made the situation explains itself.

The task of analyzing the conditions of some forty railroads covering a large portion of the continent, one railroad keeping its accounts quite differently from another in some particulars, one allowing 6% for depreciation and another a half of 1%, one going through a process of reconstruction, another deferring its maintenance, some closely inter-related with others by intercorporate connections—all these factors tend to confuse the situation.

Consolidated average figures are interesting and suggestive, but in order to test the credence to be attached to them, it is well for a more extended analysis to be made of one or a few representative railroads. In the past this has been the custom of the Interstate Commerce Commission; it was in all three advanced rate cases in 1910. It has been the custom of the Supreme Court of the United States in practically all of the very important rate cases, even where they concern all the carriers in a given state.

In the Western Advance Rate Case, you treated the Santa Fe and the Burlington as standard roads throughout that inquiry "by which to make measurement." *Western Advance Rate Case,* 20 I. C. C., 307, 376. You also made frequent reference to other railroads in the territory, but more extended analyses of those two companies were made.

In this investigation we have added a company to those just named. We have selected the North Western Railway as another typical carrier in the territory for several reasons:

The North Western Railway has led the fight for the Western railroads.

Ninety per cent of the North Western's mileage is located in the states primarily involved, North Dakota,

South Dakota, Nebraska, Minnesota, Iowa, Illinois and Wisconsin. Although there are but few advances locally in Illinois and Wisconsin, to Chicago and Milwaukee, yet the vast bulk of the traffic moving into these cities would be affected by the advances.

The North Western will be shown to be very representative of the entire group of railroads in the northwest in regard to its traffic density and earnings.

THE BASIS.

Various bases have been adopted by this Commission and by the courts from time to time for the purpose of testing the adequacy of revenues. In the framing of these different methods, certain elementary principles have been laid down. We find these doctrines gradually developing and crystallizing without much substantial modification or change in the principles themselves. Although the tests proposed have been quite different in different cases, yet the principles have remained quite constant without alterations of any substantial character.

The Supreme Court of the United States in *Smyth v. Ames,* 169 U. S. 466, laid down a principle that the basis of all computations as to reasonableness of rates shall be the fair value of the property devoted to public service. The definition of the elements going into fair value was left in quite an indefinite shape by the court in that decision. Since then the principles therein enunciated have been gradually evolved, developed and interpreted. After all, it is well that hard and fixed rules were not laid down at that time, because it has only been by the slow process of discussion and investigation that wise principles have been developed. Some have said that the basis outlined by the Supreme Court in *Smyth v. Ames, supra,* was for the testing of whether rates were confiscatory or not, and it was not intended to apply that basis to the work of a Commission in determining whether rates are reason-

able or not. We do not believe that position is correct. We would rather believe that the rate of return, after the fair value is arrived at, would vary when investigating whether rates were confiscatory, or whether rates were adequate and reasonable. In some cases the Supreme Court has upheld earnings of 2% and 3% as not being confiscatory. But a Commission would not hold those to be adequate. The fundamental doctrine going into the determination of fair value should apply in both cases. The fact is, the case of *Smyth v. Ames, supra,* has been adopted constantly by state Commissions and courts since then, for the purpose of determining adequacy of revenues. This Commission itself has used the doctrine there laid down in urging Congress to give facilities to the Commission to determine the fair value of railroad properties for the very purpose of the consideration of the reasonableness of rates. A fact of importance to note, in this connection, is that the railroads on the very eve of making that valuation, are practically rendering it worthless for the purposes for which it was intended. They are determining issues that should not be determined until that valuation is found. It may be that in some cases, that necessity has been established. This may be true in the Southwestern Case, in what we have called the Southwestern Case of 1910—the case of *Texas Railroad Commission v. Atchison, Topeka & Santa Fe Railroad Company, et al.,* 20 I. C. C., 463. The same thing may have been true in the Eastern Advance Rate Case, decided in 1914. However that may be, we will now proceed to consider various other tests that have been suggested.

Any general averages including the rate of earnings on the book value of property of companies guilty of mismanagement and high finance, cannot be accepted as a basis for advancing their freight rates.

By that act you would place your seal of approval upon

the high finance and mismanagement of such properties as the Chicago & Alton, and the Frisco, whose reckless violation of principles that are reasonable and right, have made them notorious on both sides of the ocean.

By adopting the so-called property investment of all these companies, combined, as a basis for determining the adequacy of railroad revenues in this territory, you will be placing your seal of approval upon the fictitious capitalization that has been reflected in the property investment of these companies and others like the Missouri Pacific and the Missouri, Kansas & Texas. The uncontradicted, undisputed evidence of Mr. Lauck, a gentleman gathering his data from the official reports of stockholders' committees, and boards of directors and financial documents, shows these facts for a dozen of these Western railroads. Mr. Lauck gave his authorities as follows:

> "The sources are the general sources for the basis of this investigation, the reports of the railroads to the Interstate Commerce Commission, the stockholders' reports, Poor's Manual, the Commercial & Financial Chronicle." (tr. 13530.)

The railroads had the right and opportunity to question the details entering into those totals for any of those companies; they later had the right on rebuttal to disprove those facts by other witnesses, had they so desired. They did neither. They may not have a wholesome respect for the chief witness for their employes in the recent wage dispute, but that does not affect this record. The elaborate statistical data in support of those conclusions were tendered as exhibits before the case closed. When so tendered, Mr. Wright, for the railroads, objected in direct violation of his formal agreement made of record in the following language:

> "Mr. Wright: Before commencing, Mr. Commissioner, I overlooked the fact that there are some other

> exhibits of general statistical matter which were used before the Railway Arbitration here which I will desire to submit, on the question of the financial needs of the railroads. I will submit copies of them to Mr. Thorne and others in the course of the day, so that that can be done later. They are of a general character, and I think will not require much cross-examination.
>
> "Mr. Thorne: Your Honor, I would like to have the same privilege with reference to the exhibits introduced by the Employes in the same hearing.
>
> "Mr. Wright: We will be glad to have them introduced also if they so desire." (tr. 846.)

The railroads had copies of these exhibits in their possession all the time. They could have readily verified, or corrected, or contradicted, or qualified any fact therein stated. They did not do so. That remains the undisputed, uncontradicted record in this case and we challenge any person to show an error of any substantial character in the analysis of property investment made by this witness. Further, this fictitious capitalization and exaggerated book value which these gentlemen are now parading before the public under the sonorous expression "property investment," is common knowledge.

Further, this evidence as to the fictitious capitalization and property investment is confirmed by other portions of this record, and by decisions of this Commission.

We are not compelled to rely upon Mr. Lauck's testimony alone. There is abundant confirmation of the substantial accuracy of his figures on this part of the case.

DIFFERENT TESTS.

Several bases have been widely discussed in determining whether any given amount of return is sufficient.

RAILROAD TEST: PROPERTY INVESTMENT.

Book value of cost of road and equipment, which is the so-called property investment, is the basis upon which the carriers practically rest their case.

THE SO-CALLED "PROPERTY INVESTMENT" FIGURES, RELIED UPON BY THE CARRIERS IN THIS PROCEEDING INCLUDES HUNDREDS OF MILLIONS OF DOLLARS OF VALUES, UPON WHICH THEY ARE NOT ENTITLED TO RELY AS A JUSTIFICATION FOR AN ADVANCE IN FREIGHT RATES.

One Hundred Million Dollar Excess in "Property Investment" of Santa Fe—the Uncontradicted Evidence in this Case.

The testimony of Mr. Powell, concerning the $100,000,000 excess property investment, as well as capitalization, of the Atchison, Topeka & Santa Fe Railway Company (tr. 4774) remains the uncontradicted, undisputed evidence in this case.

Eighty Million Dollars Excess in "Property Investment" of M., K. & T. According to the Interstate Commerce Commission.

In 1910 this Commission eliminated over $80,000,000 in the capitalization and property investment of the Missouri, Kansas & Texas Ry. Co.; before you compared the earnings with property investment, in order to determine the adequacy of revenues of that property. (*Texas Railroad Commission v. A. T. & S. F.*, 20 I. C. C. 463.) That decision further confirms the statement and testimony to which we have referred.

One Hundred Million Dollar Excess in the "Property Investment" of the Burlington Railroad, According to the Interstate Commerce Commission.

"PROPERTY INVESTMENT."

The railroads are practically resting their case upon their so-called "Property Investment," which is their book cost, or book value, of road and equipment. We believe this attempt is fundamentally wrong.

This Commission in the last Western Advance Rate Case, that of 1910, declined to consider $100,000,000 of the "property investment" of the Burlington Railroad as a justification for an advance in freight rates. This will be found described by the Commission in the 20th Volume of your reports, pages 337 and 338. There it is shown that the comptroller of the company testified that the total investment in the property from the sale of stocks and bonds amounted to $258,000,000, while they claimed a return upon $530,000,000. "The difference between these two figures represents first, investment in the property made out of earnings; second, increased value of right of way and terminals owned by the company." In other words, all but $258,000,000 represented improvements out of surplus and the unearned increment.

Both of these grounds are discredited as justifiable for an advance in rates as shown in pages 339 and 340.

While the Burlington in the 1910 case, was in fact asking a return upon this excess amount of $272,000,000, yet the cost of road and equipment at that time,only amounted to $364,000,000. Consequently, we have stated that you refused to accept $106,000,000 as a justifiable basis for an advance in the freight rates. That further confirms the testimony to which we have made reference. Your report as to the Chicago & Alton, as to the Chicago, Milwaukee & St. Paul, and your investigation of the Frisco, futher confirms the testimony and statements to which we have referred.

The propositions that we are discussing as to the excess capitalization and property investment over fair value entitled to a return, are further confirmed by state valuations which have been made by various Western states, and which were introduced in this record in this case, not by the state commissions, but by the chief counsel for the railroads in an effort to offset certain figures that were introduced by Mr. Jurgensen.

TWO HUNDRED MILLION DOLLAR EXCESS IN PROPERTY INVESTMENT OF RAILROADS IN WISCONSIN AND MINNESOTA.

The so-called property investment of the interstate railroads, parties to this case, which serve the states of Wisconsin and Minnesota, have been valued by those states. These valuations have been determined by disinterested parties, not for the trial of this proceeding, but in order to test the adequacy of state made rates. These will be further discussed under another subject; suffice it to say at this time that the excess property investment in those two states, over their present value, aggregates approximately $200,000,000.

FIVE HUNDRED MILLION DOLLAR EXCESS IN PROPERTY INVESTMENT OF RAILROADS IN FIVE STATES, ACCORDING TO SWORN TESTIMONY OF CHIEF ENGINEER FOR MINNESOTA STATE COMMISSION.

Mr. D. F. Jurgensen, Chief Engineer for the Minnesota Railroad & Warehouse Commission, an engineer of some 15 or 20 years' experience, has used the basic data that has been compiled in five Western states in connection with their valuations, this including the two mentioned above. A description and summary of his work will be given elsewhere. At this time it is sufficient to say that these valuations, compiled upon a common basis adopted by Mr. Jurgensen, show an excess property investment compared to present value of the same properties, amounting to over $500,000,000.

PROPERTY INVESTMENT REPUDIATED BY THIS COMMISSION IN 1908.

In your annual report to Congress for the year 1908, page 85, you stated: "This is no place to enter upon an extended criticism of the practice of American railways in the matter of their property accounts, nor is such a criticism necessary for the purpose in hand. It is sufficient to refer to the well-known fact that no court, or commission, or accountant, or financial writer would for a moment consider that the present balance sheet statement purporting to give the 'cost of property' suggests, even in a remote degree, a reliable measure either of money invested or of present value."

PROPERTY INVESTMENT DISCREDITED IN 1914 BY THE INTERSTATE COMMERCE COMMISSION.

The following is an extract from your decision in the Five Per Cent Case:

> "While the property investment accounts are used herein for the purpose of comparison it must be understood that they are not accepted by the Commission as evidence either of the actual cost or the present value of these properties."
>
> *The Five Per Cent Case,* 31 I. C. C. 351, 361.

SINCE 1907 MILLIONS OF DOLLARS HAVE BEEN ADDED TO PROPERTY INVESTMENT AS OF THAT DATE, THAT CANNOT BE CONSIDERED AS A JUSTIFICATION FOR AN ADVANCE IN FREIGHT RATES.

The carriers repeatedly stated on the stand that they have been building betterments, improvements and additions out of surplus earnings, which they had charged to property investment; but they did not state the amount. Since 1907 the railroads in this case have added over one billion dollars to their property. Because of the condi-

tion of the record we cannot state what portion of this came from surplus, but very large sums, aggregating $28,000,000 on one railroad, for instance, have been so built.

This Commission specifically declined in 1910 to consider the values of properties which the public builds for the carriers, as a part of the property upon which they can demand an advance in freight rates. *(Eastern Advance Rate Case,* 20 I. C. C. 243; *Western Advance Rate Case,* 20 I. C. C. 307; *Texas Railroad Commission v. Atchison, Topeka & Santa Fe,* 20 I. C. C., 463.)

The two leading railroad presidents who testified in 1910, President Willard, of the Eastern railroads, and President Ripley, of the Western railroads, also specifically stated they would not claim a return upon betterments and improvements built out of surplus earnings. The said extracts from their testimony have been made a part of the record in this case.

In spite of the three unanimous decisions of this Commission in 1910, where the proposition was thoroughly and clearly considered and decided—in spite of the declaration of the two leading railroad presidents in the 1910 Advance Rate Case,—in spite of the declaration of this Commission in the original Five Per Cent case,—these carriers are here today relying upon this property investment, which has been so thoroughly discredited, a property investment which this record conclusively shows contains hundreds of millions of dollars in excess values not entitled to any consideration in this case. The amounts that were wrongly charged to the property investment account prior to 1907, are still in those accounts, and since 1907 you have the additions and betterments built out of surplus.

We do not believe this Commission is ready now to reverse itself on this issue and to adopt as a basis for conclusions, figures which include several hundred mil-

lion dollars which you have previously held cannot be used to justify increases in rates.

We do not believe this Commission has abandoned those basic doctrines which have become established in these former cases. A showing of percentage return on property investment is of little or no significance in this proceeding as indicative of the adequacy or inadequacy of revenues.

LANE TEST.

Mr. Lane suggested the actual sacrifice of the investor as properly the true basis, if it could be secured. This included the original cost, plus deferred profits. This factor is, of course, extremely difficult to secure. Mr. Lane also gave a very comprehensive analysis of the whole railroad situation over an extended period of years.

RAILROAD SECURITIES COMMISSION TEST.

Railway credit is constantly referred to in the cases. This was suggested as the true basis by the Railroad Securities Commission appointed by President Taft.

PROUTY TEST.

The reasonable return on capitalization, providing the said capitalization does not exceed the fair value of the property, we will refer to as the Prouty basis. It is a practical application of railway credit as the basis for conclusions, until the valuation of the properties is actually arrived at by the Commission.

SUPREME COURT TEST.

Present fair value is the basis laid down by the Supreme Court of the United States for all computations as to the reasonableness of rates.

We will apply these various bases to the facts presented of record, so far as time will permit.

The public is primarily interested in seeing that these carriers shall have adequate funds to maintain their properties. This comes first in importance, before any test is made of the adequacy of the profits.

I.

WESTERN RAILROADS HAVE ADEQUATE FUNDS WITH WHICH TO MAINTAIN THEIR PROPERTIES.

Fully realizing the basic and fundamental character of the two issues relating to maintenance and to credit, it was our original purpose to give very extended consideration to both of these subjects. This was especially true in view of the fact that the carriers in the East had claimed their inability to properly maintain their properties; also to the fact that the Western railroads had flooded the Western newspapers with paid advertisements to the effect that they had been unable to maintain their properties.

President Bush of the Missouri Pacific, and President Felton of the Chicago Great Western, conceded the fact that their maintenance was of a higher standard than formerly. Mr. Wettling confirmed this for the roads generally. (tr. 454, 214, 778, 779.)

The most important and fundamental concession made by the carriers in the Western Advance Rate Case was in connection with this subject of maintenance. By Mr. Wright's concession, at the beginning of the introduction of the evidence by the protestants, that they were able to adequately maintain their properties, he eliminated the necessity for consuming much time on this issue.

The circumstances surrounding the concession may be briefly described as follows:

Mr. Ellis had introduced an exhibit containing quite

extended statistics relative to the maintenance of railroads in the Western district, with some introductory and explanatory comments attached to the said tables. It was our plan to supplement these tables with a further analysis, going more into detail of the proof of the ability of Western carriers to maintain their properties, as we had formerly done in the Eastern Case.

Mr. Ellis was offered as a witness, not as to text matter contained in the exhibits, but as to the accuracy of the statistics contained in the exhibits.

These exhibits showed that the Western railroads had been making very large and substantial increases in their maintenance expenditures, raising the standard of their properties to a higher level.

At the conclusion of Mr. Ellis's testimony Mr. Wright demanded the opportunity to cross-examine some one on the text accompanying the figures in the exhibit offered. A gentleman offered himself for that purpose; but Mr. Wright's ardor to cross-examine suddenly cooled, and he declined to make any cross-examination except to ask the question: Where had any of the railroads claimed they were unable to maintain their properties? Then ensued the following:

> "Mr. Wright: Who in this case is claiming that they have not had the money to keep up their property?
>
> "Mr. Thorne: In the paid advertisements in Iowa.
>
> "Mr. Wright: We have not had any paid advertisements and nobody in this case has had any connection with them. Is there anybody in this case that has made that contention?
>
> "Mr. Walter: Let us waive that. Do you say you have the money?
>
> "Mr. Wright: Yes, we have maintained our properties and we expect to. I never made any contention of that kind in this case, and so far as any advertise-

ment in Iowa is concerned, nobody connected with this case in the handling of it has anything to do with it.

"Mr. Walter: My purpose in rising was to get formally on the record the admission you do have the required money to keep your property in the shape which you think it ought to be in.

"Mr. Wright: Yes, I am not going back on that." (tr. 4663, 4664.)

At no stage of the record was there any serious claim made by the carriers contrary to the foregoing concession made by Mr. Wright, the chairman of the committee on behalf of the carriers. Consequently this relieves us of a heavy burden, and we will not consume further time in discussion of this issue.

II.

THE SECURITIES OF REPRESENTATIVE WESTERN RAILROADS ARE MORE ATTRACTIVE TO THE INVESTING PUBLIC THAN THOSE OF COMPANIES ENGAGED IN ANY OTHER LINE OF INDUSTRY IN THE UNITED STATES.

> "Must we not for the larger public interest, whatever may be thought by this or that shipper, make the business of financing railroad transportation so desirable to the investor that the necessary funds for betterments and extensions will soon be forthcoming."
>
> Hon. Martin A. Knapp.

One basis for the determination of the adequacy of the revenues of a public service corporation exists, which is closely related to all of the other issues in the case. The credit of a company reflects the judgment of actual investors as to the prosperity of such a company; and further, it accurately portrays the ability of that company to secure additional capital. For these two reasons railway credit is one of the most basic issues, if not the fundamental issue, until this Commission has completed the gigantic task of appraisement of American railways.

> "We hear much about a reasonable return on capital. A reasonable return is one which under honest accounting and responsible management will attract the amount of investors' money needed for the development of our railroad facilities. More than this is an unnecessary public burden. Less than this means a check to railroad construction and to the development of traffic."
>
> Railroad Securities Commission.

These railroads are not relying upon the European War. They do not claim that they were unable to meet their operating expenses, taxes, or interest on debts. They are not asking additional money for these purposes. What other reasons have they for demanding more money? They do not claim in this case a lack of funds to properly maintain their property.

The carriers say they do not have, and cannot secure, the money with which to build additions and betterments, and to improve their properties as they should, and as the public demands.

There are two sources from which this money can come:

1. They can build additions and betterments out of current earnings, charging part to operating expenses, and part to surplus, (Felton, tr. 164); or
2. They can construct them out of capital.

Structures of that character should be built out of capital, and not out of current earnings.

Railroads are not entitled to demand that freight rates shall be so high that they can pay a reasonable return on the present value of their property, and then have additional earnings with which they can add permanent revenue producing improvements to that property. This proposition is well established in the decisions of the courts and of this Commission.

However, railroads that are properly capitalized, reasonably well located, and operated, are entitled to, and should have, earnings that are large enough to render their securities attractive to investors.

One of these propositions presents a question of law and public policy, the other a question of fact. We will discuss them separately.

The justice in the demand by the carriers that well managed and properly capitalized railroads should have

an adequate credit, so that needed funds can be secured for additions, betterments, and improvements, forces the issue of railway credit into a pre-eminent place. Next to the ability to maintain railroad properties, the public is most deeply concerned in the ability of these companies to improve and better their properties.

Next to maintenance the greatest issue in the case is railway credit. The bondholder and stockholder are concerned in this phase of the case, as well as the public.

RAILWAY CREDIT.

First, let us consider the evidence upon this subject that has been offered by the railroad companies; and then we will consider the evidence offered on behalf of the public.

It will be well to bear in mind upon whom the burden of proof rests.

We will present to you the evidence not only of the market prices of outstanding securities, but also the rate at which these railway companies have been able to borrow from their bankers, giving to you the confidential prices that heretofore have rarely, if ever, been disclosed in any hearing before any court or commission. Accompanying these, we will present data concerning representative industrials and public utilities.

The western railroads with an increasing dividend, could not claim the necessity for wanting more money in order to pay their dividends. With an increasing maintenance expenditure, they have abandoned the claim for more money for that purpose. With ability, as a whole, to meet their operating expenses, taxes and interest on bonds and debt, those factors are removed; but the argument especially strong is that the market prices of their securities have declined, making it impossible to secure necessary money for much needed betterments and im-

provements; and that an advance in freight rates will restore the confidence the public has in those securities.

DIFFERENCES IN EASTERN AND WESTERN CASE.

A similar situation existed in both the Eastern and Western Advanced Rate Cases of 1910. Heretofore the evidence on this issue, which has been offered by the railroads, has been very elaborate. In the Eastern Advance Rate Case, there were some eight or ten witnesses, including four or five bankers, two or three bond experts, and several railroad executive officials of representative lines, who testified extensively upon this subject.

Let us consider what the carriers have presented on this issue for your consideration in the present proceedings. The amazing meagerness and inconsequential character of this evidence is one of the remarkable developments of the case.

FESTUS J. WADE.

The leading witness for the railroads on the subject of railway credit, as a whole, was Festus J. Wade, a banker of St. Louis, who announced, on taking the stand, in answer to a question by Mr. Luther A. Walter, as to whether he appeared as a banker or a railroad official: "I come here distinctively as an American citizen." Later he added that he was a director of the Frisco. It also developed that he had recently agreed to become a director of the Iron Mountain Railway. The true function of Mr. Wade in the present controversy is best expressed in his own language:

> "Mr. Walter: Can you give them the assistance of your experience by pointing out the means by which they can determine whose credit is the better, the carriers' or the industrials'?
>
> "Mr. Wade: I wouldn't attempt to do that.
>
> "Mr. Walter: You cannot do it.

> "Mr. Wade: I might be able to, but I would not attempt to do it.
>
> "Mr. Walter: What is the purpose of your testimony, then, Mr. Wade, but to help the Commission?
>
> "Mr. Wade: No other purpose except to help the Commission, to help the railroads and to help the United States of America.
>
> "Mr. Walter: Will you include the world in that?
>
> "Mr. Wade: I would, because we have got to finance the world. (tr. 373.)
>
> "Mr. Walter: Yes?
>
> "Mr. Wade: And we are doing everything for the world right now." (tr. 374.)

Mr. Wade was vouched for by Mr. Wright, leading counsel for the carriers as follows: "I think Mr. Wade knows the effect on credit as well as any man in this country."

Mr. Wade commenced his oration on the stand with a lot of glittering generalities, among which the following is typical:

> "You hear a great deal about depression, about the general trend of affairs throughout the nation. If you be a Democrat you will claim it is on account of the war; and if you are a Republican, with equal emphasis you will point to the tariff and the currency bill and divers and other things, from a political point of view. But, if you are a student of the economic conditions of this nation, then you are forced to the conclusion that the constant tirades made upon the railroads of this nation have brought the investing people of millions, to discredit them and desire to put their money elsewhere." (tr. 299.)

Mr. Wade was entirely unable to substantiate his generalities by any statement of fact, and gave evidence of considerable genuine or feigned ignorance about the railroad situation, generally, in the West. For example, he was unable to state what were the representative railroads in this territory, and he was unable to give the rate,

time, or conditions of the securities issued by any of the following companies: Chicago, Burlington & Quincy; Atchison, Topeka & Santa Fe; Chicago, Great Western; Chicago, Milwaukee & St. Paul; Chicago & North Western; Chicago, St. Paul, Minneapolis & Omaha; Illinois Central; Southern Pacific Lines; and he did not know what proportion of the traffic was handled by these companies.

Mr. Wade admitted that he did not know the rate at which representative public utilities were able to borrow money, nor was he advised as to the rate at which representative industrials were able to secure money during the past year, or during the past five years.

Mr. Wade could not name one specific instance during the past year in which any of the representative companies in this territory offered any 5% long term bonds that would not be taken; nor could he name any time during the past five years when any of these companies' 5% bonds were refused.

> "Mr. Thorne: Take a representative railroad in this territory, what would you consider an average company amongst these thirty-seven?
>
> "Mr. Wade: Well, not being a railroad expert, I wouldn't care to pass upon that. I might make some of these other fellows jealous.
>
> "Mr. Thorne: You described the companies I have referred to as the exceedingly strong?
>
> "Mr. Wade: The very best in the district.
>
> "Mr. Thorne: Do you know what portion of the traffic they handle in the territory?
>
> "Mr. Wade: No, I am not a railroad man.
>
> "Mr. Thorne: You have no idea?
>
> "Mr. Wade: I have no idea.
>
> "Mr. Thorne: And you do not recall the rate at which any of those companies were able to borrow money, or don't you know as to last year?"
>
> The witness was unable to do so. (tr. 361.)

"Mr. Thorne: You made a statement this morning that the short-term paper of these railroad companies was much higher, that the yield was much higher than the short-term paper of large industrials?

"Mr. Wade: Yes, sir.

"Mr. Thorne: Did you in making that statement refer to the short-term paper of a company like the Great Northern?

"Mr. Wade: No, I never had any Great Northern paper.

"Mr. Thorne: Or Northern Pacific?

"Mr. Wade: No.

"Mr. Thorne: Burlington?

"Mr. Wade: No.

"Mr. Thorne: Illinois Central?

"Mr. Wade: No.

"Mr. Thorne: Union Pacific?

"Mr. Wade: No." (tr. 342.)

"Mr. Thorne: The witness has testified that it is difficult for these companies to borrow money. I desire to ask, can you name any specific instance during the past year in which any of the companies which I named offered any 5% long-term bonds that would not be taken?

"Mr. Wade: No, I cannot.

"Mr. Thorne: Can you name any time during the past five years in which any of the companies I named offered 5% bonds that were not taken?

"Mr. Wade: No, I do not know whether they did or not, that is a matter of record which I would not attempt to go into, as I explained to you before." (tr. 397-8.)

"Mr. Thorne: Mr. Witness, do you know of any issue of bonds that have been made by any of these companies that I have stated to you, during the past few years,—five years?

"Mr. Wade: Yes, in a general way I know that the St. Paul issued bonds, and the North Western, and I believe the Great Northern and Pacific roads.

"Mr. Thorne: Now take one of them. Take the Milwaukee.

"Mr. Wade: I say, I only know in a general way. I did not handle them.

"Mr. Thorne: And you do not know at what rate?

"Mr. Wade: No, and—

"Mr. Thorne: Do you know at what rate any of those companies were able to dispose of long-term bonds at any time during the past five years?

"Mr. Wade: Right offhand, no." (tr. 348-9.)

Practically the only subject upon which Mr. Wade had the courage to make a definite concrete statement was in regard to the decline in prices on railway securities, to the effect **that railroads had to pay from 50% to 75% more for their money, than public utilities and industrials**; and, second, Mr. Wade testified that while there had been a marked decline in the market prices of railroad bonds during the past ten or fifteen years, there had been practically no decline since 1900 in the market prices of the bonds of St. Louis, Philadelphia, or any other of the 20 largest cities in the United States, with the possible exception of New York. Mr. Wade in his direct testimony especially urged the decline in market prices on railroad securities as evidence of a declining credit.

Later Mr. Norton presented in evidence the actual yield computed from actual market prices reported in the Financial Chronicle for St. Louis bonds, and these official reports show that the market prices on St. Louis bonds, instead of remaining constant since 1900, as Mr. Wade under oath testified, the said prices had actually declined 25%. This decline in prices caused an increase in the yield amounting to 25%, as shown in Norton's Exhibit 3, tr. 63.

Further, Mr. Wade stated as to the 20 largest cities, as given above, if you take New York our of the category, you will find municipal bonds have been about steady and that the variation in them has not been one-tenth, one-fifteenth in price in 10 years as against the railroad

bonds. As a matter of fact, Mr. Norton, who presented the detailed data as well as his summary, conclusively proved that the market prices had declined, or the yields had increased by 31%, while on the representative Northwestern lines of railroads, during the same period of time, the decline in price, as evidenced by the increase in yields, only amounted to 15.4%, and for the Southwestern railroads the increase was still less, being 6.3%. The authority used by Mr. Norton for these quotations was the Financial Chronicle.

On cross-examination Mr. Wade conceded that the Financial Chronicle was absolutely reliable and that any statements made by it could be depended upon as being correct; that there was not a better authority in the United States (tr. 335).

Further Mr. Wade testified that these railroads had to pay more for the use of their money than manufacturing and industrial concerns for the same kind of credit.

Later Mr. Norton proved conclusively, and incontestably, that the market prices of outstanding issues as well as of new issues of these western railroads' securities were higher than any other class of companies in any other line of business in the United States, the details of which showing will be presented later.

MR. SCHAFF.

Mr. Schaff and the other railroad officials who took the stand could remember very little about any other companies than the Missouri, Kansas & Texas and the Missouri Pacific, with relation to any issues of securities. As to practically all other companies, their memory seemed to be a blank. Not one witness for the carriers could recall one other company than these two, whose issues did not sell at a better rate than any other company they could name, in any other line of business. The witnesses for the carriers plead almost entire ignorance as to the prevailing

rates of interest throughout the country, or the ability of companies in any other lines of business in the United States to borrow money or the rate they had to pay.

Mr. Wade was the one, only, striking exception to this proposition, and his astounding misstatements on the situation will be fully presented when we are discussing the shippers' testimony.

Mr. Schaff recalled an issue of the Southern Pacific, but it will be noted that this company is not a party respondent to these proceedings. He also recalled an issue on the North Western which sold, he thought, at something like 5%, but recalled no other company in any other line of business that was able to borrow money at a better rate at that time.

Mr. Felton recalled an issue of the Burlington. He likewise could not name any company in any other line of business that could borrow at a better rate. Mr. Schaff admitted further that he had at no time made any investigation of railway credit of companies in the district as a whole.

Because of the very great importance to be attached to this subject of railway credit, and because of the somewhat remarkable comments that can be made in regard to the carriers' evidence upon this issue, we shall produce in full the exact language adopted by the witnesses when on the stand, so that the Commission itself can readily determine the substantial correctness of our statements.

> "Mr. Thorne: Do you know the last note or bond issued by any company in this case, the last that you can remember, what was it?
>
> "Mr. Schaff: I think the Missouri Pacific issued or extended some notes within a year.
>
> "Mr. Thorne: Your memory does not go to any issue made by the North Western, does it?
>
> "Mr. Schaff: I think the North Western sold some first mortgage bonds within a reasonably short time, I could not name the date.

"Mr. Thorne: About what year was that?

"Mr. Schaff: I think within a year past.

"Mr. Thorne: Do you know what part of the year, during the war or before?

"Mr. Schaff: I do not think I could definitely say.

"Mr. Thorne: Do you know at what rate they were issued?

"Mr. Schaff: I think at about 5%.

"Mr. Thorne: Can you name any other company in any other line of business that was able to borrow money cheaper than that at that time?

"Mr. Schaff: Cheaper than 5%?

"Mr. Thorne: Yes, at that time.

"Mr. Schaff: No, sir.

"Mr. Thorne: Do you remember any issues by the Burlington, notes or mortgages, within the last few years?

"Mr. Schaff: No, sir.

"Mr. Thorne: Of the Northern Pacific?

"Mr. Schaff: No, sir.

"Mr. Thorne: Of the Great Northern?

"Mr. Schaff: No.

"Mr. Thorne: The Union Pacific?

"Mr. Schaff: No.

"Mr. Wright: They are not in this case.

"Mr. Thorne: The Union Pacific passes through Nebraska, does it not? It taps the territory upon which you are proposing advances, the mileage hauled through it, and Kansas also. Do you recall any issues by the Santa Fe in the last year or so?

"Mr. Schaff: No, sir.

"Mr. Thorne: Do you recall any issues by the Southern Pacific?

"Mr. Schaff: Yes, I recall an issue of bonds of the Southern Pacific.

"Mr. Thorne: When?

"Mr. Schaff: Some time during the last year.

"Mr. Thorne: How much?

"Mr. Schaff: My recollection is about $75,000,000.

"Mr. Thorne: What part of the year?

"Mr. Schaff: I do not know.

"Mr. Thorne: At what rate?

"Mr. Schaff: I think at about 6%.

"Mr. Thorne: Do you remember whether it was before or after the war commenced?

"Mr. Schaff: I do not recall it. No, sir.

"Mr. Thorne: Would it be difficult for you to verify that at noon hour? I am informed that that was at the rate of 5%.

"Mr. Schaff: I do not think I could." (tr. 90-1-2-3.)

"Mr. Thorne: I asked you the rate at which other companies had been able to market their securities and you were able to name them on only two of those companies and those were two of the weaker lines in that territory, were they not?

"Mr. Schaff: I named two in the southwest.

"Mr. Thorne: You don't claim to know anything about the credit of these roads, do you?

"Mr. Schaff: No.

"Mr. Thorne: So your statement that their credit is poor only applies to those two railroads?

"Mr. Schaff: I know what the general situation is.

"Mr. Thorne: You haven't made any investigation of the rate at which these other railroads in this territory have been able to borrow money in the past few years, have you?

"Mr. Schaff: Some of them.

"Mr. Thorne: Name any besides those two that you named this morning.

"Mr. Schaff: I can only give my impression as to that, my opinion.

"Mr. Thorne: Have you made any investigation? There is no impression about that.

"Mr. Schaff: No, no definite investigation, no, sir." (tr. 144-5.)

MR. FELTON.

Mr. Felton, President of the Great Western, made similar admissions. He conceded, for example, that he could not name any company that could borrow money at a cheaper rate than his own railroad company.

"Mr. Thorne: "Can you borrow money as cheap now as you could before the war commenced?

"Mr. Felton: You can borrow money as cheap today for short terms, I should say, as you could before the war commenced, but since the war we have paid as high, as I told you, as 7½% for one year money.

"Mr. Thorne: What month was that?

"Mr. Felton: That was November.

"Mr. Thorne: Can you name any other company in any other line of business in that month that was able to borrow at a cheaper rate than you?

"Mr. Felton: No, I think not. I think higher rates than that were paid.

"Mr. Thorne: Have you investigated the rates at which companies in other lines of business, I mean these other railroads, have been able to borrow money during the past year?

"Mr. Felton: Some of the southwestern roads, the Missouri Pacific, I believe, had to extend their notes, and—

"Mr. Thorne: We have had testimony about the Missouri Pacific and the M., K. & T.; they seem to be quite favorite companies for you gentlemen to mention. Can you name any securities issued by the Burlington or the North Western during the last year or the last three or four years?

"Mr. Felton: I do not know about the Burlington, but the North Western sold some bonds recently, some 5% bonds.

"Mr. Thorne: When were they sold, about when?

"Mr. Felton: Last fall, I think.

"Mr. Thorne: Do you remember about what month it was?

"Mr. Felton: No, I do not, but I could easily find out by referring to the Financial Chronicle.

"Mr. Thorne: Do you know at what rate they sold?

"Mr. Felton: My recollection is about 5%.

"Mr. Thorne: Can you name any other company in any other line of business that could sell their securities at a better rate at that time?

"Mr. Felton: No, I think they were in a very favorable position.

"Mr. Thorne: Can you name any securities sold in the last year or the last three years or four years by the Union Pacific or the Atchison, Topeka & Santa Fe?

"Mr. Felton: I have not kept track of the Santa Fe and the Union Pacific at all.

"Mr. Thorne: You would not be able to say whether their credit was good or poor?

"Mr. Felton: Oh, yes, I would. I should say the credit of all three of these companies was the highest and that is the reason they can sell their bonds at a comparatively low rate of interest.

"Mr. Thorne: I am asking you, then, are there not hundreds of industrial companies in this country that borrow money, of which we have official records in the reports of the exchanges?

"Mr. Felton: Well, I do not follow their finances, so I could not answer you definitely.

"Mr. Thorne: There are also hundreds, something like three thousand utilities listed by Moody, are there not?

"Mr. Felton: I do not know, I am sure." (tr. 188-9, 190-1.)

"Mr. Thorne: "You cannot state then whether you have made any comparison of the issues of any of these companies during the past month?

"Mr. Felton: I had no reason to.

"Mr. Thorne: Have you made an analysis of the rate at which these different companies, the different industrials and the different public utility companies, have been able to market their securities at the same time at which these western railroads have attempted

to market their securities? If you have not made such an investigation, we will pass on to another question. If you have, I would like to have the results of that investigation.

"Mr. Felton: I have not made any such investigation. I have confined it to our own field." (tr. 193-194.)

J. W. LUSK.

J. W. Lusk, one of the receivers of the Frisco Line, made some sweeping statements about the poor condition of railroads. He dwelt with special emphasis upon the condition of the Frisco. In speaking of what he described as the property of the Frisco and its failure to earn, he admitted that other lines of business well located and having valuable facilities were unable to earn a return on the value of their property.

Mr. Lusk's statement that the railroads "were in the soup" proved to be founded merely upon a general impression and was not based upon any investigation of his own. He admitted finally that his knowledge was restricted to the Frisco, and he did not know anything about that prior to December 5, 1913; that he had never investigated the financial condition of the railroads as a whole in this territory, that he did not know that their net earnings in 1913 were greater than ever before in their history, and he was unable to name what were the average, or representative, roads in this section.

"Mr. Thorne: I presume in your experience in St. Paul as a banker that you have known people in other lines of business than the railroad business, that had fine property, well located, worth money, who are unable to earn a return on the value of the property?

"Mr. Lusk: Yes.

"Mr. Thorne: When did you become connected with the Frisco?

"Mr. Lusk: December 5, 1913.

"Mr. Thorne: Were you connected with the company or the property in any capacity prior to that date, Mr. Lusk?

"Mr. Lusk: Not at all.

"Mr. Thorne: You have no personal knowledge of the management or the operation of the property during those former years?

"Mr. Lusk: No, sir.

"Mr. Thorne: You do not know whether that property was well operated or whether it was maintained properly, do you?

"Mr. Lusk: No, except just when the receivers took possession it had been somewhat run down, as is always the case previous to any receivership.

"Mr. Thorne: I understand you have no personal knowledge of the financial operations of the people in charge of it prior to that time?

"Mr. Lusk: No." (tr. 589-590.)

"Mr. Lusk: Every one knows that, no matter how you say it comes about, it is simply a fact, that railroads, to use a little slang, are 'in the soup,' no matter how you say it came about. I will not say anything about that, but they are down. You can lay it to low rates or European war or Mexican war or floods or depression or economy, but the railroads are down under the water.

"Mr. Thorne: Judge, do you make that statement from a personal analysis of the financial operations of these railroads as a whole, or do you make that statement from a general impression that you have of the situation?

"Mr. Lusk: Well, I, of course, have conversed a great deal as to how they are getting along in the southwest, and also with Mr. Hill in the northwest, and Mr. Hannaford of the Northern Pacific, and Mr. Clark of the Omaha. I know these men personally, and when I am at home we are at the same club, and I talk with them about it. Of course there is a big falling off in all of their earnings. Mr. Hill said he had never had as bad a falling off as he had all last fall, and yet the country is full of good crops and high prices. It is a remarkable state of affairs. How much it can be laid to low rates—of course anybody can figure out that a two-cent fare in the west here

is entirely too low. There is not any mistake about that.

"Mr. Thorne: You would differ from the Minnesota Commission and the Supreme Court of the United States on that, I presume?

"Mr. Lusk: The Minnesota Commission and the United States Supreme Court did not hold that two cents was high enough. They said they had not proved it was too low; they did not really pass on it.

"Mr. Thorne: They said the railroads failed to prove their case.

"Mr. Lusk: It was too low for the Minneapolis & St. Louis and the Great Western, but the Northern Pacific and the Great Northern from their proof did not show that they were earning enough.

Mr. Thorne: Have you made any other investigation of the situation except in conversing with the railroad men? Have you investigated to see what the earnings were, for instance, the last few years on these railroads?

"Mr. Lusk: Oh, no.

"Mr. Thorne: You do not know then, as a matter of fact, that their net earnings in 1913 in this western territory were greater than ever before in their history?

"Mr. Lusk: No, I do not know about that.

"Mr. Thorne: You have never made an investigation of what you might say would be average roads or representative roads as distinguished from weaker roads and the extremely strong roads in that territory?

"Mr. Lusk: No, my attention has been confined right here to the Frisco and I have told just what we are doing and that is all I can do. (tr. 592-3-4.)

WETTLING ON CREDIT.

We asked each witness who took the stand on behalf of the carriers, as to any information concerning the credit of western railroads. Mr. Wettling was the only gentleman to produce any definite information concern-

ing their ability to borrow money. He had compiled this data from answer to interrogatories which he had addressed to the different companies. He was asked to state the issues during the past five years for the Northwestern group of railroads. Because of its definite character, in direct confirmation of the results as shown in Mr. Norton's exhibits, we call your attention to the details as shown in the testimony of Mr. Wettling.

Attention is called to Mr. Wettling's utter ignorance of any financial needs of the carriers; and yet he was the chief witness, and the only witness, for nine-tenths of the railroads in the territory.

BURLINGTON.

> "Mr. Thorne: You don't know anything about the financial condition of the Burlington, its financial needs, whether it has to borrow money, has any immediate demand for money, and if so, whether it has any difficulty in getting that money?
>
> "Mr. Wettling: Answering a part of that question, I know that the Burlington is considered as one of the roads that has the very highest credit and can borrow money cheaper than the average; but as to what their immediate needs are, whether they need to borrow money, I don't know. I should think they would need to borrow money if they wanted to make extensions and betterments to any appreciable amount.
>
> "Mr. Thorne: Do you know whether they are having any difficulty in getting the money?
>
> "Mr. Wettling: I do not.
>
> "Mr. Thorne: You don't know whether they are having any difficulty in getting money at reasonable rates, do you?
>
> "Mr. Wettling: It would appear from the bonds they sold in 1914, that they are not having much difficulty in getting it at reasonable rates, although they are paying considerably more than they did in former years for the same security. (tr. 4053-55.)

"Mr. Thorne: As I understand, you do not claim to have any knowledge or to have made any investigation concerning the credit of railroads as compared to companies in other lines of business?

* * * *

"Mr. Wettling: Yes, I have made some little investigation in a general way and made some comparisons generally as to railroads, municipals, industrials and public service corporation bonds.

"Mr. Thorne: Can you name any company that was able to borrow money at a better rate than the Burlington last year, which you made reference to?

"Mr. Wettling: No. (tr. 4060.)

NORTH WESTERN.

"Mr. Wettling: The North Western borrowed some money on their general mortgage gold bonds due in 1987, having 73 years yet to run, and bearing interest at 4%, on a basis of 4.4%. They sold them at 92. (tr. 4064.)

"Mr. Thorne: So that the same comments you made about not knowing of any companies in any other line of business that could borrow at a better rate last year, would apply to the North Western?

"Mr. Wettling: Yes, sir. They also borrowed $4,000,000 on equipment trust notes for which they received $3,821,856.80, being sold at the rate of 95.54 and yielding 5⅛%. (tr. 4065.)

"Mr. Thorne: Can you name any company in any other line of business that was able to borrow money under similar conditions for a similar period at a better rate?

"Mr. Wettling: I have none in mind now. I think that some public service corporations were able to borrow money at a better rate than that last year.

"Mr. Thorne: Name one.

"Mr. Wettling: I say I have not them in my mind now, but I think I can investigate and bring them to you.

"Mr. Thorne: Can you name any company in any other line of business that was able to borrow money for long periods of time during the past five years at a better rate than what the North Western has been able to do at the same time?

"Mr. Wettling: I do not think so.

MILWAUKEE.

"Mr. Thorne: In regard to the Milwaukee, at what rate did they borrow money last year?

"Mr. Wettling: 4.4 and $4\frac{7}{8}$, for the larger part of their borrowings. (tr. 4066.)

"Mr. Thorne: Will you give the same answer as to the Milwaukee that you gave as to the North Western and Burlington?

"Mr. Wettling: Generally so, yes; their credit is about on a par with the others.

UNION PACIFIC.

"Mr. Thorne: A fourth road you named was the Union Pacific out of the six that you said were representative of this territory.

"Mr. Wettling: Yes, sir.

Mr. Thorne: Can you give any companies in any other line of business than the railroad industry that are able to borrow money at a better rate than the Union Pacific last year, or during the past five years, at the same time?

"Mr. Wettling: I have not made investigation and do not know what the Union Pacific is borrowing at.

NORTHERN PACIFIC.

"Mr. Thorne: The same situation applies to the Northern Pacific?

"Mr. Wettling: Yes, sir.

GREAT NORTHERN.

"Mr. Thorne: The Great Northern?

"Mr. Wettling: Yes, sir.

GREAT WESTERN.

"Mr. Thorne: At what rate did the Great Western borrow money during the past year?

"Mr. Wettling: They did not borrow any money; they just exchanged some securities, as I understand it. It would appear on a basis of practically 4%, if it were taken as a borrowing.

"Mr. Thorne: Can you name any other companies in any other line of business than the railroad industry that are able to borrow money at a better rate than the Great Western in the past year or past five years?

"Mr. Wettling: I do not think they really borrowed. I think that was just an exchange of securities.

"Mr. Thorne. They have borrowed money at times?

"Mr. Wettling: Not the last year.

"Mr. Thorne: In the past five years?

"Mr. Wettling: In the past year.

"Mr. Thorne: Read the question, Mr. Reporter.

"Mr. Wettling: Never mind, if it is five years. That is all I want to know. In 1911 the Chicago Great Western sold $4,000,000 of their 4% fifty year First Mortgage Gold Bonds on a basis of 85.75, being a yield of 4⅞%. That is apparently all the sales in the past five years.

"Mr. Thorne: Then I repeat the question. You may read the question, Mr. Reporter.

(Question read.)

"Mr. Wettling: I am not able to name one; but I think I can produce some, and will if you desire. I have not the tabulations or figures before me for any other industries, municipal corporations, public

service corporations or such, and I am therefore not able offhand to give any answers to the questions you are propounding. (tr. 4067-8-9.)

SOUTHWESTERN GROUP TERRITORY.

"Mr. Thorne: You have made no analysis of the financial history of those lines serving the territory south of that line or their present financial needs?

"Mr. Wettling: No, sir." (tr. 4080.)

While Mr. Wettling was on the stand, he also discussed information as to what the Rock Island Railway Company has been able to obtain its money for during the past five years. Notwithstanding the condition of a certain holding company, we find the Rock Island has preserved a good credit as evidenced by the following extracts from Mr. Wettling's testimony:

CHICAGO, ROCK ISLAND & PACIFIC.

"Mr. Wettling: The Rock Island borrowed \$13,980,000 on their first refunding mortgage bonds, running thirty years, sold at 89.82, the yield being 4.6%.

"In 1910 the Rock Island borrowed on the same series of bonds \$6,195,000 for which they received 87.40, making a yield of 4.8%.

"They borrowed \$11,000,000 in the same year at 90.46, being a yield of 4.6%.

"They borrowed \$5,300,000 on equipment trust notes for ten years, carrying 4½% for 99.25, being a yield of 4.6%.

"They borrowed \$6,750,000 on equipment trust notes, series D, running 15 years at 4½%, on a basis of 95.50, which was a yield of 4.9%.

"In 1911, on the C., R. I. & P. first refunding 30 year mortgage bearing 4%, they borrowed \$5,324,000 at a rate of 86.14, which was 4.9%.

"In the year 1912 they borrowed on the first

refunding 30 year mortgage $3,500,000 on a basis of 87½, making a yield of 4.8%.

"They borrowed on their 20 year gold debenture bonds, carrying 5%, $20,000,000, on which they suffered a discount of $1,200,000, selling them at the rate of 98 cents, being a yield of 5⅛%.

"They sold equipment notes, series F, running 15 years, and carrying 4½%, to the amount of $360,000 on a basis of 95.79, which was at the rate of 4.9%.

"In 1913 they borrowed on equipment notes, series G, 15 years, 4½%, $4,590,000, on a basis of 96.05, which was at the rate of 4⅞%." (tr. 4077-78.)

No one took the stand, on behalf of the carriers during the entire proceeding, who claimed to have any knowledge about the financial needs of any of the Northwestern group of railroads except the Great Western, or who undertook to make the claim that any of those railroads had any trouble whatever in securing all the money they needed, at reasonable rates.

AS TO THE MARGIN BETWEEN STOCK RATE AND BOND RATE.

As to the margin between stock rates and bond rates, undoubtedly from the standpoint of the railroads it would be nice to build their lines with 4% money and secure a return on the value of their property at the rate of 6%. That handsome margin would be quite acceptable undoubtedly, for where a railroad was bonded to two-thirds of its value, the stockholders would have over ten per cent return.

That handsome margin would be quite acceptable undoubtedly, but that margin is not necessary in order to maintain credit. Over ninety per cent of the public utility companies classified in our exhibits in this case have no such margin between their bond rate and their stock rate. In England there is very little margin between the stock rate and the bond rate. The average dividend in 1912 (the latest available statistics) on ordi-

nary stock in England was 3.71, while the average rate of interest on bonds was 3.39, a variation of less than half of one per cent. In the United Kingdom as a whole the average dividend, including Scotland, Ireland and Wales, was 3.45 and the average interest rate on bonds was 3.43. (Official Reports to Parliament. Ellis Exhibit No. 2, pages 22, 24.)

SHIPPERS' EVIDENCE ON CREDIT.

In previous cases before this Commission, we have made claims and statements as to railway credit that have been supported by computations taken from financial publications, also by cross-examination of railway witnesses, but never have we been able to substantiate the propositions in the manner in which that has been done in the present case upon this basic issue.

If railway credit is sound, it is very evident that in the eyes of the shrewdest, ablest financiers of the country, railway earnings are also in good condition; and if railway credit is sound, it also proves that the railroads are able to get the money for needed additions and betterments, if they desire to secure the same.

Heretofore our analyses have made comparisons of market prices which do not take into consideration the length or duration of the security, and consequently they were not as accurate as the yield. Another objection that has always been made, has been that the public prices on outstanding securities do not represent the actual price the corporation has to pay to the banker for new money. Heretofore we have found it practically impossible to answer this objection although we thought it was not sound.

Mr. Wade on the witness stand testified that it was impossible to get that figure, that it was a matter of a personal, private nature, that companies would not dis-

close. In the present case we have completely met both of these objections; and these have heretofore been practically the only objections raised to our discussion as to railway credit. We believe we are now able to present to you through the services of Mr. Norton, the ablest review of railway credit that has ever been made before any tribunal. The work which we have performed has only incidental reference to Mr. Wade's testimony. That is a very minor reason for our investigation. We have undertaken to give to this Commission, a reliable compilation properly setting forth the situation as to railway credit on such a scale, and in such a manner, that is unimpeachable and unanswerable. We have gone to this trouble and expense because we have felt this is probably the dominating issue in the case, and it should be thoroughly tested once, at least.

It may be that the facts we are now able to present to you would not have been established in the Eastern case. We do not know whether that is true or not; suffice it to say, that we do now present them to you as to these western railroads.

The principal argument advanced by railroad companies in support of the proposition that their credit is impaired is the fact that they have to pay higher rates on borrowed capital than in former years, and market prices on bonds of the same denomination have been declining during recent years, resulting in a gradually increasing yield upon issues of bonds. They attempt to charge this up to inadequate freight rates.

Our investigation shows, what has heretofore been stated, that the market prices on railroad bonds have declined. The question arises, is that the result of declining railway credit, or is it the result of other causes?

It is true that the increase in the yield on the bonds of a given company could result from a gradual impairment of that company's credit, because of adverse legislation,

reductions in freight rates, advances in wages, cost of supplies, etc. On the other hand there might be an increase in the yields on those bonds due to changes in the general financial situation. This might be occasioned by an extraordinary production of gold, or other factors affecting business generally.

In other words, either one of two causes may produce an increase in bond yields: First, the intrinsic character or credit of the company itself; or second, the general financial situation. Both of these factors may be in existence. Those factors, one group opposing the other, are consolidated and reflected in the rate at which a company can borrow money at any given time. Four and a half per cent bonds may sell at a less rate than formerly, not because of any unpaid earnings of the company itself; but because the money rate has gone up. If that be the case you could make a ten or fifteen per cent advance in freight rates, and yet 4½% bonds of representative railroads would still be commanding less prices than in former years, because of the gold supply. Our task is to determine, if possible, whether the credit of these railway companies has increased, or declined. It is true market prices on 4% bonds have declined. We want to know what caused it. The best test would be to find out the increase in the yield on a representative group of these railroads and compare that with the increase in the pure money rate. The pure money rate would be independent of those other factors, such as increased operating costs, etc.

The true test of the effect of the general financial situation would be the pure money rate on long term securities, were that figure attainable; because that, in itself, would reflect precisely the factor to which we have referred. The next best test is the closest approach we have to the pure money rate, which is represented, we believe it will generally be conceded, by government securi-

ties and the bonds of the highest class of municipalities, where innumerable personal factors of hazard and risk in the business itself are eliminated to the largest possible extent. If the yield upon the bond of a company engaged in private business increases greater than the pure money rate, then that is evidence that the credit of the said company has declined during the period of time covered. On the other hand, if the yield of the said company has increased at a less proportion than the pure money rate, then that shows that the credit of said company is on a better plane in the latter portion of the period covered. It is for the purpose of applying this test to railway securities that we have compiled the actual yields on the bonds of the four greatest nations in the world whose securities are quoted, and second, the twenty largest cities in this nation. These we compare to the yields upon the securities of representative railroads in this territory. (Norton Ex. 3, page 1.)

Taking the bonds of the Northwestern railroads running from 1900 to 1914 inclusive, we find there is an increase in the yield of .6%, or an increase over 1900 of 15%. On the Burlington this increase amounted to 16%. On the Milwaukee 19%; on the St. Paul, Minneapolis & Omaha, a decline of about 8%. On the Great Northern, an increase of 10%. Minneapolis & St. Louis, an increase of 55%. Northern Pacific, 7%. Union Pacific, 9.8%, making an average increase on all of approximately 15%.

Mr. Wade on cross-examination stated:

> "Mr. Thorne: Would you give your opinion as to whether there has been a decline in the market prices of municipal bonds during the past ten years?
>
> "Mr. Wade: Yes, and no. It depends entirely upon the municipal bonds.
>
> "Mr. Thorne: Can you name any large municipality of the twenty largest cities, say, in the country?
>
> "Mr. Wade: How would New York do?

"Mr. Thorne (continuing):—where there has not been a decline since 1900?

"Mr. Wade: Oh, yes.

"Mr. Thorne: What?

"Mr. Wade: St. Louis.

"Mr. Thorne: What was the security and the price?

"Mr. Wade: The city bonds, 4% par.

"Mr. Thorne: Maturity?

"Mr. Wade: Well, usually twenty or thirty years.

"Mr. Thorne: You say the price was higher last year than it was ten years ago?

"Mr. Wade: No, it is about the same." (tr. 362-363.)

That testimony is a remarkable example of pure fiction. The increase in the yield on St. Louis bonds since 1900 has been 25%, as shown on Norton Exhibit 3. Further Mr. Wade testified:

"Mr. Thorne: Can I ask your judgment, from your general knowledge of the situation, as to whether there has been a decline or an increase in the market prices of representative municipal bonds?

"Mr. Wade: What do you call representative municipal bonds?

"Mr. Thorne: What would you call them?

"Mr. Wade: St. Louis.

"Mr. Thorne: What others?

"Mr. Wade: Well, that is enough.

"Mr. Thorne: There are a few other representative municipalities in this country.

"Mr. Wade: Very likely so.

"Mr. Thorne: Consider the twenty largest cities of the country; consider the municipal bonds of those twenty cities; what would be your judgment whether there had been a decline or increase in the majority of those securities?

"Mr. Wade: If you take New York out of that category, you will find that municipal bonds have

been about steady, and the variation in them has not been one-tenth—one-fifteenth in price in ten years, as against the railroad bonds.

"Mr. Thorne: We will stand on that answer, your Honor." (tr. 363-364.)

Here is another wholesale misrepresentation of the true situation. Instead of the prices remaining steady, they have actually declined 31%, as shown in Norton Exhibit 3. The increase in the yield, or the decline in the price on the government bonds of the United States, England, France, and Germany, amounted to over 17%.

The Northwestern group of railroad bonds increased in yield 15% during the same period. In other words, the decline in the price in these railroad bonds has been at a less rate than the decline in the price on government bonds, or those of the twenty largest cities in the United States. This proves that the credit of these companies has increased substantially since 1900.

Mr. Norton testified that it would generally be conceded that the yield on government bonds was probably slightly below the pure money rate, because of special privileges, etc., accompanying such bonds; and further, that the municipal bonds were slightly above the pure money rate because of some element of hazard in connection with them, exceeding that of a government bond. In other words, that the pure money rate lies in that zone somewhere, between those two boundary lines. He concluded that it would be fair to take the mean between those two lines, as the closest approximation that we can obtain to the pure money rate. This pure money rate becomes the test, the yardstick of the situation. It can be applied to any individual company or any class of companies. (Norton Exhibit 3, Vol. 1, page 36.)

During the period 1900-1914, we find this approximate pure money rate to have increased from 3.02 to 3.77, an increase of 24.8%, as compared with an increase in the

yield, representing a decline in the prices, on western railroad bonds amounting to 15%.

By this statement we do not intend to say that the Northwestern group of railroads has a better credit than the United States government, or the twenty largest cities in this nation. On the contrary, securities of that character will probably always have a better credit than private companies. That is the price we are paying for private ownership.

These statistics simply demonstrate that the credit of railroads has improved, not that the credit of governments has declined. The government has been established. The railroad is getting onto a better plane, a more solid foundation. There is a slight variation from year to year that simply demonstrates, again, the necessity of making your review over an extended period of time, rather than over a few years.

In the following table, we give the pure money rate in the first column; in the second column is given the average yield on the Northwestern group of railroads; in the third column, the average yield on the Southwestern group of railroads; in the fourth column, the average yield of the Western and Southwestern consolidated; in the fifth column, the so-called coefficient of relative credit, which represents the ratio of the pure money rate to the Western railroad bonds; in the sixth is the said coefficient of relative credit applied to the Western and Southwestern railroad bonds combined.

COEFFICIENT OF RELATIVE CREDIT.

	1900	1901	1902	1903	1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	1914
Pure Money Rate—Average Actual Yields—Mean of Municipals and Four Governments	3.02	3.01	3.05	3.08	3.17	3.11	3.22	3.42	3.47	3.41	3.54	3.55	3.59	3.82	3.77
Average Actual Yields—Western Railroads—(45 Bonds)	3.9	3.9	3.9	4.1	4.1	3.9	4.0	4.4	4.3	4.1	4.2	4.2	4.3	4.6	4.5
Average Actual Yields—Southwestern Railroads (41 Bonds)..............	4.8	4.4	4.4	4.6	4.5	4.3	4.4	4.7	4.7	4.4	4.6	4.6	4.7	5.0	5.1
Average Actual Yields—Western & Southwestern Railroads Combined (86 Bonds)	4.3	4.1	4.1	4.3	4.3	4.1	4.2	4.5	4.5	4.2	4.4	4.4	4.5	4.8	4.8
Coefficient of Relative Credit (Ratio of Municipals and Four Governments Combined to Western Railroads)...	77.4	77.2	78.2	75.1	77.3	79.7	80.5	77.7	80.7	83.2	84.3	84.5	83.5	83.0	83.8
Coefficient of Relative Credit (Ratio of Municipals and Four Governments Combined to Western and Southwestern Railroads Combined)......	70.2	73.4	74.4	71.6	73.7	75.9	76.7	76.0	77.1	81.2	80.5	80.7	79.8	79.6	78.5

(Compiled from data shown in Norton Exhibit 3, Vol. 1, pages 21 and 47.)

In the foregoing table the Northwestern group of railroads (corresponding to what Mr. Norton called the Western group) includes all of the bonds of all the railroads in the Northwestern group, which were quoted substantially continuously from 1900 to 1914 in the New York Commercial and Financial Chronicle, and embraces the following railroads: Chicago, Burlington & Quincy; Chicago, Milwaukee & St. Paul; Chicago & North Western; Chicago, St. Paul, Minneapolis & Omaha; Great Northern; Minneapolis & St. Louis; Northern Pacific and Union Pacific. The Southwestern group includes the following: Atchison, Topeka & Santa Fe; Chicago, Rock Island & Pacific; Colorado & Southern; Kansas City & Southern; Missouri, Kansas & Texas; Missouri Pacific; Southern Pacific; St. Louis & San Francisco; St. Louis & South Western. This list includes all of the railroads, any of whose securities were quoted substantially continuously between 1900 and 1914, such railroads being embraced in the Commission's original suspension order in this case, and serving the Southwestern Tariff Committee Territory, excluding only those, two-thirds of whose mileage lies outside of said territory. There is only one exception to this—the Southern Pacific Company was taken in lieu of its subsidiaries.

It will be noted that the yield on the Southwestern bonds is considerably higher than on the Northwestern bonds. This is graphically shown in the accompanying chart "Z." The chart represents the relative plane of credit, the pure money rate being the best. Next comes the Northwestern group of railroads, and next the Southwestern group of railroads. The increase in the yield on the Southwestern group of railroads has been less than that on the Northwestern group, and less than the pure money rate. Again we state that this does not indicate that the Southwestern railroads have as good credit as the other two; in fact, the reverse is true, as everybody knows, and as the chart proves. It does mean, however, that the

Southwestern group of railroads have been getting onto a better plane during recent years. They have become

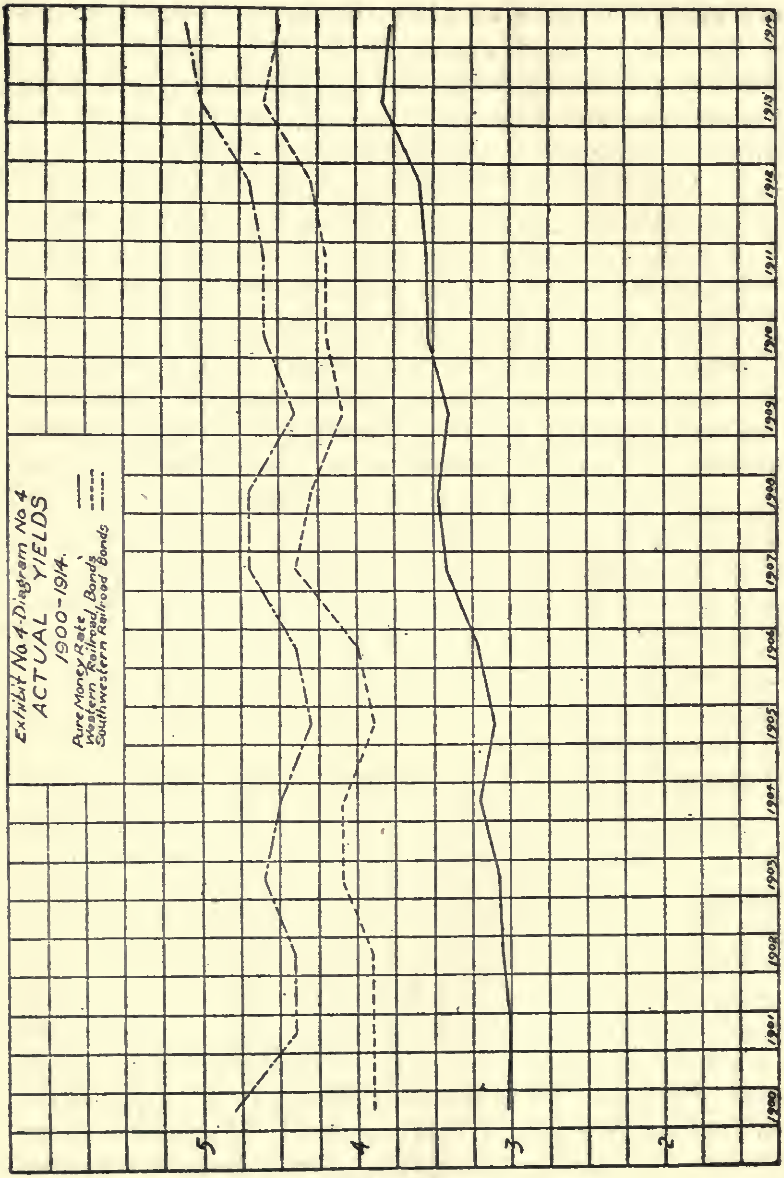


CHART Z.

more established. They have made more progress than the Northwestern group; they had more room for progress as the chart itself indicates.

ARE THE SECURITIES OF WESTERN RAILROADS ATTRACTIVE TO INVESTORS?

Are railroad securities unattractive investments? Who is the best judge whether railroad securities are attractive or not? Unquestionably that man is the investor himself. There are a few facts about this subject of credit which can be conclusively established by the records of the market places of the country for such securities.

Credit is determined by the rate at which any person is able to borrow money. If a person can borrow a given amount of money at a cheaper rate than another person, his credit is better than that of the other party. That rate at which one can borrow money is the crystallization of all the multitude of factors that go into the determination of a man's credit.

Mr. Wade testified:

> "Mr. Wright: What I am interested, Mr. Wade, in drawing out here, is the general credit of these roads in the West, and how it compares with other credit or credits of other institutions, and whether there is a difference in the situation of their credit which has been increased in the last few years.
>
> "Mr. Wade: There is distinct, emphatic and unequivocal extra charge put upon the railroad of 50 to 75% for the use of its money, as against the manufacturing and mercantile and other commercial parts of the country for the same general kind of credit." (tr. 313-314.)

That statement is not correct. Mr. Norton reports he finds the opposite to be true amongst the banking houses of New York City. (tr. 14299-14300.) Mr. Norton's experience with these matters may be summarized as follows:

Report-writer for a banking house and in charge of actuarial computations on government bonds; also in the general bond markets. Was with Fiske & Robinson, and Eugene Meyers, Jr. & Co. With the latter firm he was a general report writer, for several years. (tr. 4409.)

In the abstract of the record we reproduce a copy of correspondence with Mr. Felix Warburg, of Kuhn, Loeb & Co., New York City, which is self-explanatory. This was not permitted to become a technical part of the record, but is filed with the Commission as a part of the correspondence in connection with the case.

Mr. Norton supplemented this investigation by an exhaustive analysis of the market prices of the securities of railway and other companies, generally, in the United States, to test the accuracy of Mr. Wade's claim, stated above.

As his authority for market prices on securities, Mr. Norton used the New York Commercial and Financial Chronicle. Concerning the reliability of this publication Mr. Wade testified:

> "Mr. Thorne: Mr. Wade, is there any public record of sales of securities listed on the New York stock exchange? That is, a record that is published by persons of such a character that it commands the confidence of the bond houses and people in the banking business?
>
> "Mr. Wade: Yes, sir.
>
> "Mr. Thorne: What would you suggest,—the Financial Chronicle, is that reliable?
>
> "Mr. Wade: Quite so.
>
> "Mr. Thorne: Substantially so?
>
> "Mr. Wade: Very much so.
>
> "Mr. Thorne: Is there any better in the country?
>
> "Mr. Wade; No, I think it is about as good as any in the country. The Analyst of the Times, perhaps, is one also." (tr. 335.)

Norton Exhibit 4 contains a list of the best class of in-

dustrial and public utility securities, that are quoted at the leading market on this continent. In this list Mr. Norton gathered together all of the bond issues of all the industrials that are quoted substantially continuously, from 1900 to 1914, in the New York Commercial and Financial Chronicle.

In this table we have the securities of 36 representative industrial companies of all classes including manufacturing and industrial, coal and iron, telephone and telegraph, electric light and power, and miscellaneous bonds. The average yield on these bonds in 1914 was 5.9%; in 1913 it was 5.7%; in 1910 it was 5.4%. In other words, last year these industrials as a whole had to pay almost 6% for their money.

In Norton Exhibit 3 we have gathered together all of the bonds of all the railroads involved in this case, that are quoted substantially continuously between the same years, 1900 to 1914. In the Northwestern group of railroads there were 45 such bonds, the summary of which is shown on page 14 of said exhibit. The average yield on these 45 bonds was 4.5%. In other words the industrials as a whole, had to pay 31% more for their money than did these Northwestern railroads, in spite of the amazing declaration by Mr. Wade that the railroads had to pay from 50% to 75% more than the manufacturing and industrials. When Mr. Wade was asked to give the facts upon which he based such a startling conclusion he couldn't give any facts. He could not name the rate at which any of these railroads, with only two exceptions, were able to borrow money, and those two exceptions were the Missouri, Kansas & Texas and the Missouri Pacific, two of the weakest properties in the territory.

He was asked several times to state the rate at which other railroad companies in this territory could borrow money. Every time he admitted he could not state, and finally admitted he was not acquainted with it because

those companies did not borrow their money in the West, that the bankers in the West were too small, and that they went East for their money. (tr. 352.)

Is our list of Northwestern railroads representative? Let us see. We have used 6 bonds of the Chicago, Burlington & Quincy; 6 of the Milwaukee; 10 of the Chicago & North Western; 3 of the Chicago, St. Paul, Minneapolis & Omaha; 6 of the Great Northern; 3 of the Minneapolis & St. Louis; 7 of the Northern Pacific, and 4 of the Union Pacific, having excluded those railroads having over one-half or two-thirds of their mileage outside of the territory. We have included in this list the securities of every interstate railroad serving this territory with only one exception, the Soo Line—Minneapolis, St. Paul & Sault Ste. Marie, a company having splendid credit, as evidenced by the fact that they were able to borrow $1,800,000 in round numbers, in 1914, a period of high yields, at a rate of 4.5%, this figure including all commissions, expenses and discounts. (Norton Exhibit 5, page 22.) The reason this company was not included in the previous table, referred to as Norton Exhibit 3, page 14, is because none of their securities run through the period 1900 to 1914 inclusive.

Keeping in mind the average on the industrials of 5.9%, let us consider these individual companies. The average on the

Burlington bonds	4.3%
Milwaukee	4.4%
Chicago & North Western	4.5%
Chicago, St. Paul, Minneapolis & Omaha	3.5%
Great Northern	4.4%
Minneapolis & St. Louis	5.7%
Northern Pacific	4.7%
Union Pacific	4.5%

In every instance the yield was 25% less than that on the industrials with only one exception, and that was the Minneapolis and St. Louis, and even this one was less than the average on the industrials. The Minneapolis & St.

Louis is not a representative railroad in any sense of the word and cannot be accepted as a standard. This the Commission itself held in its decision in the Western Advance Rate Case of 1910.

No carriers in this case made a claim that that company was representative. Not a witness, who was asked to state the representative typical lines in this territory, made any mention of the Minneapolis & St. Louis.

Further, we find that these railroads had a better credit last year—notwithstanding their repeated cries of wolf, claims of panic, and crises—they had a better credit and were able to borrow their money cheaper than any class of industrials.

First: If you will refer to Norton Exhibit 4, page 3 (Volume I, sheet No. 72-c), you will notice that five representative manufacturing and industrial securities of the highest type, including the American Cotton Oil, American Spirits, American Thread, American Writing Paper and International Paper, had an average yield on their bonds of 7.3%, and excluding the American Writing Paper which is abnormally high, the average is 5.7%, which is practically one-fourth greater than that of the Northwestern group.

Second: On the same page is shown the yields on coal and iron bonds. With only one exception, that of the Lehigh Coal & Navigation Co., the yield on the bonds in that series is greater than the average on the Northwestern railroads. The average yield on the coal and iron bonds is 5.5%, which is approximately one-fourth higher than that on the Northwestern railroads.

This is exclusive of the Wilkesbarre security which if included, would make the average still greater on the industrials.

Third: In the Telephone and Telegraph bonds we have the highest class of securities represented, including the

Western Union, the Chesapeake & Potomac, the Cumberland, and New York & New Jersey. In every instance the yield on these securities is greater than the average on the Northwestern railroads. The average on the Telephone and Telegraph bonds is 4.9%.

Fourth: Under Miscellaneous bonds, we have a dozen high-class securities represented. The reason we say they are high-class is the proposition Mr. Wright himself advanced that the older, better-established companies are the ones whose securities run back to 1900. We find here in every instance the yield on the industrial higher than the average on the railroads. The average of these twelve industrial securities amounts to 6.3%, which proves again that the railroads get their money cheaper than the industrials.

Fifth: The only electric light and power bond running through the period is the Niagara Falls Power 5's giving a yield of 4.9%. This of course is a high-grade security and well seasoned, and commands the confidence of the public. We find the average of the industrials is over 20% higher than the yield on this security. It is therefore a much higher grade security than the average industrial bond, and yet we find the Northwestern railroads are paying less for their money than does the Niagara Falls Power Co.

Turning to the public utilities we find 38 bonds whose securities run through the period from 1900 to 1914. Thirty-three of these 38 bonds of public utilities are paying more for their money than the Northwestern railroads. The average yield on the 38 public utility bonds is 5.1%, which is higher than the average on the Northwestern railroads.

This is exclusive of the 10-23rd St. Ferry Co. security, on which the yield was so high that if included the average would be less representative.

Because of the foregoing facts so far as the Northwestern group of railroads is concerned, we must conclude that their credit is superior to that of any class of industrial or public utility bonds that are quoted on the market. We have certainly selected a high-grade, typical, representative class of industrial and public utility securities for the purpose of comparison. In the list of railroads, we have used every interstate railroad serving the territory, providing it has at least one-third of its mileage in that territory.

Are the figures we have given above as to the market prices of the securities of these companies, a sufficiently accurate gauge of the rate at which these people can secure money; or should we investigate the yield on new issues of securities?

This was the point urged by the Eastern railroads which we did not attempt to meet. We did not at that time have data showing the yields on new issues. The same objection was made in 1910, and again we did not have the data to meet the issue. However, we are fortunate at this time in being able to present to the Commission the most comprehensive analysis of yields on new issues that has ever been made by any person, so far as we have been able to ascertain. The railroads secured at our request, data concerning new issues of their securities from 1901 to 1914 inclusive. They divided this into two groups: the period from 1901 to 1907 inclusive and 1908 to 1914 inclusive. We have only attempted an analysis of the latter period; because of the work involved, and the importance in this particular case, we have confined our investigation to those years.

In Norton Exhibit 5 we have gathered together the par value, and net proceeds, above all commissions, discounts and other expenses, of all the new issues on the Western and Southwestern railroads between the years 1908 and 1914 inclusive. Also, we have similar data on all of the

industrials and public utilities for which we could secure such information. This includes all of the industrials and public utilities in the City of New York, and the state of New York, and the state of Massachusetts that had to secure the consent of the Commissions in that city and those states, before the issues could be made. Also, we have included the yields on a number of industrials, including the United States Steel Corporation, and all of its subsidiaries. This list of industrials and public utilities is not in any sense of the word whatever, a selected list; it simply includes all of those we have described in the states of New York and Massachusetts, and all of the industrials we were able to obtain, comprising a very representative class of high grade securities.

Concerning the use of this exhibit, there are a few pertinent comments that should be made. In the first place, the yields on new issues of such representative railroads as the Chicago, Burlington & Quincy, Chicago & North Western, Minneapolis, St. Paul and Sault Ste Marie, Chicago, St. Paul, Minneapolis & Omaha, Southern Pacific and Santa Fe, will be found very close to the yields arrived at by the use of current quotations on outstanding bonds. In other words, the exhibit on new issues is a complete confirmation of the reliability of the current market quotation on outstanding securities as an index of railway credit for representative railroads. A few examples will be given.

Take the year 1914; the yield on the new issues of the Chicago & North Western is 4.4%. This figure is arrived at after making due allowance for all commissions, discounts and expenses connected with the issue. The yield on the outstanding securities of the same company arrived at by means of current quotations on the market is 4.5%, a variation of 1-10 of 1%. The small yield on one of these railroad bonds was due to the fact that the ownership of this bond carried with it the right to exchange

for another bond at a higher yield, covering a longer period of years, partaking somewhat of the nature of a right to purchase stock at or below market price.

During the same year, 1914, the Burlington paid 4.4% for new money. An average arrived at by the use of current quotations on the market for outstanding securities is 4.3%, a variation of 1-10 of 1%.

The same situation—the reliability of the current quotations as an index of credit—is further confirmed by taking the consolidated figures for all of the Northwestern railroads, 1908 to 1914 inclusive. The average yield, using new issues, in 1908 was 4.5%; using current market quotations, 4.3%. In 1909 using new issues, 4.1%; using market quotations 4.1%. In 1910 using new issues 4.1%; using market quotations 4.2%. In 1911 using new issues 4.5%; using market quotations 4.2%. In 1912 using new issues 4.7%; using market quotations 4.3%. In 1913 using new issues 4.5%; using market quotations 4.6%. In 1914 using new issues 4.6%; using market quotations 4.5%. Taking any representative railroad the same fact is established. The North Western has been constantly referred to as a typical railroad in this territory.

In 1914 this railroad issued $8,000,000 in gold bonds at a yield of 4.4%. Compare that figure with the following yields arrived at by the use of market quotations, as shown on page 5 of Norton Exhibit 3, 4.4%, 5.2% (sinking fund), 4.6%, 4.7%, 4.4%, 3.3% (a security maturing April 1, 1915, and is explained by the witness. Bonds of well established railroad properties as they approach maturity, approximate close to the pure money rate) 4.5%, 4.4%, 4.7%, 4.3%. Taking a straight average we find the average of yields to be 4.4% compared with the average on new issues 4.4%.

A similar comparison was made relative to the Burlington while the witness was on the stand.

Another very representative railroad in this territory, which is average and typical is the Chicago, Milwaukee & St. Paul. This company refused to give information concerning its new issues of 1914. However, we do have the data concerning its issue of $30,000,000 in 1913, whereon the yield was 4.6%. Compare that yield on new issues with the following yields arrived at by market quotations as shown on page 5, Norton Exhibit 3: 4.3%, 4.3%, 4.6%, 4.5%, 4.6%, 4.5%.

On the whole when a large number of securities are under consideration, we find it is safe to conclude that the current market quotations are the most reliable index of credit which we have for representative railroads. This proposition is further evidenced by the fact that the close inside relationship between the large banker and the directorate of a corporation, may make it possible for the banker to secure an exorbitant commission, which would make the resulting yield not typical of the credit of the company. The best evidence of the credit of a company is the demand of the investors on the market place where there is actual competition in the purchase and sale of securities, and not the price in some private back office, where the intercorporate relationship is made to subserve the financial gains of an interested party.

It may be claimed that the banker will make more exhaustive and intelligent analyses of the financial condition of a company, than the common investor on the market place who is speculating as to futures. That is true temporarily speaking, but there is on the market place not only a reflection of the judgment of one or two intelligent men with large resources, but there is a large group of interests constantly in touch with market prices on the securities of our representative railroad companies. The banker getting the inside bottom price will not let loose of his security, for less than its fair value, regardless of his handsome margin. Then on the market in-

vestors include large insurance companies of the country, large bankers and trust companies, as well as the management of many large estates, constantly in search of good investments and it is this interplay and constant competition of the great investors of the country, with enormous resources back of them, which dominate the trend in market quotations over a long series of years. Now and then the speculator fails to estimate correctly what the permanent investor is going to do; but the permanent investor is the controlling force, and it is his judgment on the market place, that gives us our best index of the true credit of a given company.

Our comments above have related to long term securities and those of representative companies. What we have said as to the close relationship between the market prices, and the rate on the yields on new issues, does not apply to weak companies, or to short term obligations. The reasons we have given above for claiming that the market quotations furnish the best test, rather than new issues, as to the credit of a company, apply with double force as to the new issues of weak companies—companies that are not well established—companies who are hard up for money, and that are being milked by a few financial pirates.

The Frisco gives an interesting illustration of that fact. In 1914 we find the yield on a new issue of the Frisco to be 13.1%. Market quotations on outstanding issues for the same year (page 21 Norton Exhibit 3) show a yield of 5.2%. Some person secured a handsome margin in this case.

On the Southwestern Railroads we find the following:

The yield on the new issue of the Denver & Rio Grande was 5%. The yield arrived at by the use of current market quotations was ascertainable only in part because the market quotations did not run through the period covered by our table. In 1914 the rate on new issues of the

Kansas City Southern was 5.3%; using the market quotations it was 4.8%. We are unable to secure the yield on the market quotations of the Trinity & Brazos Valley because the market did not run through the period covered. The yield on the Illinois Central using market quotations, was 4.5%. Using new issues it was 4.5%, 4.7% and 5.1%. On the Chicago & Alton the yield on a general mortgage issue of $3,500,000 was 6.3% while the yield using market quotations was 5.4%, showing a very large variation which will be found to be generally true of the weaker lines financially.

The real estate note of the Chicago & Alton for $17,000 was 5.0% which approximates the farm mortgage rate rather than the credit of the company. These are the only railroads other than in the Western and Southwestern group covered by both exhibits.

It is our conclusion, and we believe the Commission should so find it, that on representative railroads in this territory, the current market quotations of outstanding issues is a fairly accurate index of the credit of a company; that the yield disclosed by the said market quotations very closely approximates the yield on new issues of securities by the same carriers. Further, that the margin between the yields on new issues and that on outstanding securities, as evidenced by current quotations, is very much greater on the smaller, weaker classes of railroads than the representative stronger roads, which handle the bulk of the traffic.

We have been unable to secure any representative list of new issues of short term obligations for these Western railroads. The table submitted to us by the carriers in which they attempted to give the new issues, fails to show the net proceeds on any short term obligations; that is bonds or notes maturing in ten years or less for any railroads in the Northwestern territory in the year 1914, with only three exceptions—Chicago & North Western,

Minneapolis, St. Paul & Sault Ste. Marie, and Minneapolis & St. Louis. We have formerly discussed the unrepresentative character of the Minneapolis & St. Louis. The Equipment Trust series of the North Western show a yield of 5.5%, but on the Soo Railroad this is 5.1%. Passing over to the same class of securities of public utilities and industrials, we were able to secure the net proceeds on four representative companies: Staten Island & Midland showing a yield of 6%; Lake Superior Corporation showing a yield of 9%; Pacific Coast Co. 5.5% and U. S. Smelting, Refining & Mining Co. 6.2%.

In the year 1913 the only short term obligations for the Northwestern railroads furnished us, were the Chicago & North Western Equipment Trust Obligations, showing a yield of 4.7%; Soo Railroad showing yield of 5%; Minneapolis & St. Louis showing yield of 6%. In this we do not include convertible bonds for reasons which are certainly familiar to the Commission, they being not representative of the rate at which a company is able to borrow money.

Turning to the public utility and industrial companies, we find during the same year, the 8th Ave. Railroad, New York, had to pay 6%; American Bank Note Co. 6%; General Electric Co. 6.5%.

In the year 1912 in this class of securities the only example given in the data furnished by the carriers was: Equipment Trust notes of the Minneapolis, St. Paul & Sault Ste Marie showing a yield of 5%. Turning now to the public utilities and industrials we find during the same year the Kings County Electric Light and Power Co., New York, had to pay 6% (but this was a convertible debenture and therefore we are disregarding the same); General Baking Co. 6.8%; Studebaker Corporation 8%; Utah Co. 6.2%.

In 1911 the only short term obligation shown in the data furnished by the railroads, were those of the Iowa Cen-

tral and Minneapolis & St. Louis which are not representative.

In 1910 the only ones shown by the carriers in the Northwestern group are the Minneapolis, St. Paul & Sault Ste. Marie, the yield being 5.1%. The same year the Coney Island & Brooklyn borrowed $500,000 at 6.7%; the Lackawanna Steel borrowed $10,000,000 at 7.15%; Lehigh & Wilkesbarre Coal Co. secured money at 4.20% (this issue was guaranteed by the Central Railroad of New Jersey).

In 1909 the only short term obligation shown in the Northwestern group of railroads—Iowa Central and Minneapolis & St. Louis and Frisco, which as we have frequently stated, cannot be accepted as representative.

In the list of railroads, other than the Western and Southwestern, we find the Chicago & Alton, St. Louis, Brownsville & Mexican, Wisconsin Central, Chicago, Indiana & Southern, New Orleans, Texas & Mexico. The only railroad in this series that is concerned at all in this case, and that is representative in character, would be the Wisconsin Central, and the yield on its two short term notes was 4% and 4.5%, lower than any class of public utility issued of a similar character.

In 1908 there are no short term obligations shown for the Northwestern group of railroads.

SOUTHWESTERN RAILROADS.

The Southwestern railroads show a higher yield than those of the Northwestern railroads.

Using the current market quotations on outstanding issues, we find the average yield on outstanding securities of ten representative Southwestern lines in 1914 to be 5.1%. This list includes the Santa Fe, Rock Island, Colorado Southern, Kansas City & Southern, Missouri, Kansas & Texas, Southern Pacific, Missouri Pacific,

Frisco, St. Louis Southwestern, and Texas Pacific.

Turning to the industrials, whose quotations between the years 1900 and 1914 are included in Norton Exhibit 4, pages 72A, 72B, 72C and 72D, and Exhibit 3, you will find the average yield on the manufacturing industrial bonds to be 5.7% (excluding one abnormal yield of 13.5%), coal and iron bonds 5.5% (this excludes the Wilkesbarre Coal Co.); on telephone and telegraph bonds 4.9%; on Niagara Falls Power bond 4.9%, and miscellaneous bonds an average of 6.3%.

The average yield on the Southwestern railroads is lower than the yield on 25 out of the 36 industrial bonds. It is also lower than all of the bonds consolidated. The average yield on industrials being 5.9% and on the Southwestern railroads 5.1%. We find the average yield on the utilities shown on pages 72-A and 72-B of Norton Volume 1 to be exactly the same as the average for the Southwestern railroads.

In 1913 the average yield of the Southwestern railroads was 5%; on the industrials the same year it was 5.7%. On the public utilities it was 5.1%. In 1912 on the Southwestern railroads the yield was 4.7%; on the industrials 5.3% and utilities 5%. There were a large number of utilities below the Southwestern as well as above.

New issues in 1914. The only issues reported to us by the Southwestern lines were those of the Denver & Rio Grande, Kansas City Southern, the Frisco and the Trinity & Brazos Valley. We cannot accept the Frisco as representative. The yield on that was 13.1%. Its unsavory financial record is familiar to the Commission. It is common knowledge. The securities of the other three railroads show an average yield of 5.3%.

Turning to the public utilities, we find the average on those four Southwestern securities have a better rate

than the Consolidated Gas. Co. in New York City, Hudson & Manhattan Railroad Co., Interborough Rapid Transit Co. and New York Railways. The average on public utilities as shown in the exhibit is less than the Southwestern railroads. Amongst the industrials we find the Illinois Steel Co. had to pay more for its money than the Southwestern railroads, while the Duluth, Missabe & Northern, Indiana Steel and Euclid Equipment Trust bonds commanded a better rate than those of the Southwestern railroads.

In 1913 the average yield for the new issues of the Southwestern railroads was 6.2%, which is the weighted average. This high yield was due principally to the Frisco. If you exclude the Frisco the arithmetical average of the yields will be 5.4%. This was a better rate than had to be paid by the following public utilities in New York City and Massachusetts: Bronx Gas & Elec. Co., Interborough Rapid Transit Co., Boston-Worcester Street Ry. and Boston & Northern St. Ry. Co. Other utilities were able to borrow their money at a better rate. The industrials which we were able to secure show the following: American Bank Note Co. had to pay 6%, General Elec. Co. had to pay 6½%. In 1912 the Southwestern railroads paid 5.4% for their new money on an average. At this time they were not embarrassed by the insolvency of the Frisco. We find the following public utilities had to pay more for their money than the Southwestern railroads: Brooklyn Borough Gas Co., New York and North Shore Traction Co., New York Rys.

Amongst the industrials as having paid more than these Southwestern lines, were the Republic Iron & Steel Co. Other utilities and industrials secured their money at a better rate than the Southwestern lines.

These facts would seem to demonstrate, quite conclusively, that railway credit is better than that of any class of companies engaged in any other line of industry.

STOCK PRICES.

In this same way we have compiled the stock prices on all industries whose securities were quoted in the same publication—the Financial Chronicle—and published continuously between 1890 to 1914, inclusive. This, of course, includes the strongest and best classes of industrials, they being the American Cotton Oil Company, American Sugar Refining Company, American Telegraph and Cable, Consolidated Gas Company, New York, La Clede Gas of St. Louis, Pacific Mail and Steamship Company and the Western Union Telegraph Company. In addition to these industrials, we have a list of five of the strongest mining companies in the United States: American Coal Company, Consolidated Coal Company, Homestake Mining Company, Ontario Mining Company, and Quick Silver Mining Company.

From 1890 to 1899 the average price on the North Western Railroad stocks was less than the price on the industrials, excluding the mining stocks.

Ever since the year 1899, for each year, the railroads averaged more than either of the industrials, excluding mining, or the industrials including the mining stocks. Norton Exhibit 4, page 123. This is graphically shown on the accompanying chart "Y." (tr. 178.) (Mr. Norton's term, "Western railroads," is synonymous to the use of the expression Northwestern Group by witnesses Chambers, Powell and Ellis.)

The Bureau of Labor of the Department of Commerce and Labor has computed the relative prices of about two hundred standard commodities at wholesale in the United States during the past twenty years. These are fully described in the records of the Bureau of Labor. Mr. Norton has compiled a series of index numbers on commodity prices adopting a somewhat different method, which

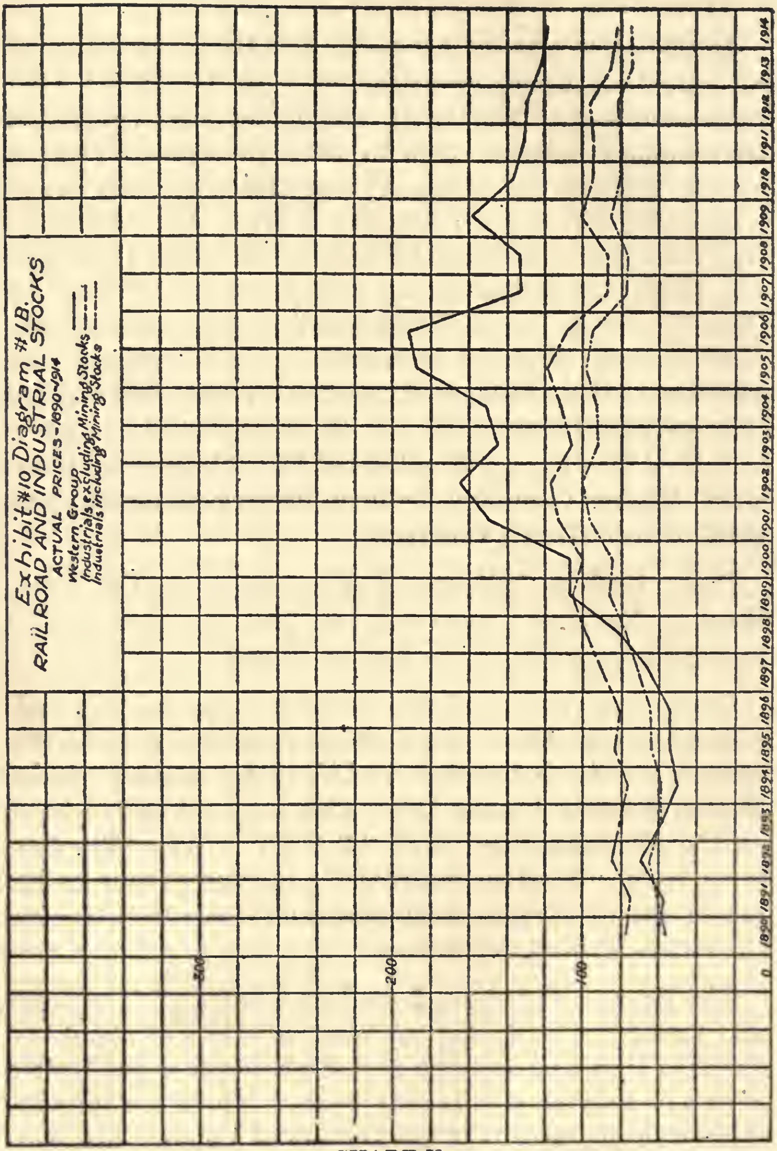


Exhibit #10 Diagram #1B.
RAILROAD AND INDUSTRIAL STOCKS
ACTUAL PRICES-1890-1914
Western Group
Industrials excluding Mining Stocks
Industrials including Mining Stocks
0
100
200
300
1890
1891
1892
1893
1894
1895
1896
1897
1898
1899
1900
1901
1902
1903
1904
1905
1906
1907
1908
1909
1910
1911
1912
1913
1914

CHART Y.

is described in the record. There is no substantial difference in the trend of prices in either group.

For the purpose of comparing the trend of prices over a period of years, we have used the same method and compiled index numbers for the market prices of the railroad and industrial stocks. The series of index numbers cover a period from 1890 to 1914 inclusive. The phenomenal increase in market prices of railroad stocks in 1900 is illustrated by this chart which is shown in Norton's Exhibit No. 3, page 123. The use of relative figures serves to exaggerate the situation. It serves the same purpose statistically as the microscope does for the botanist. However, it very fairly develops the tendency. Over a long period of time it is very instructive. We find that market prices on commodities have risen from 1890 to 1914, but the market prices of railroad stocks have gone up more than market prices of commodities, or the market prices of industrial stocks. During the period of 1906 and 1907 railroad prosperity was notoriously great; and yet we see a great decline in the relative prices of railroad stocks during that time. Mr. Norton explained that by citing the large stock allotments made by railroads those years. For instance, the Great Northern made an allotment of ore trust certificates amounting to 100%. These rights sold on the market at $78.00 per share. This was equivalent to a stock dividend. In 1906 and 1907 the Chicago North Western made a stock allotment of 45%. These rights sold on the market at $35 per share. The Chicago, Milwaukee & St. Paul in 1906, made a stock allotment at par, when their stocks were selling at $1.76. These rights sold on the market at $33.50 and $55.007, respectively, for two allotments. The Great Northern also made a stock allotment of 40% in 1907, aggregating sixty million dollars. The Northern Pacific in 1907 made a stock allotment of 60%, at par, aggregating 93 million dollars. The market value of these rights was $20.00 a share. These enormous dissipa-

tions of assets and securities explain the drop in the line in 1906-1907, when they were at the height of their prosperity; the drop coming before the panic of the following year.

The accompanying chart "X" shows the prices on the Southwestern railroad stocks, compared with industrials. The Southwestern stocks are lower.

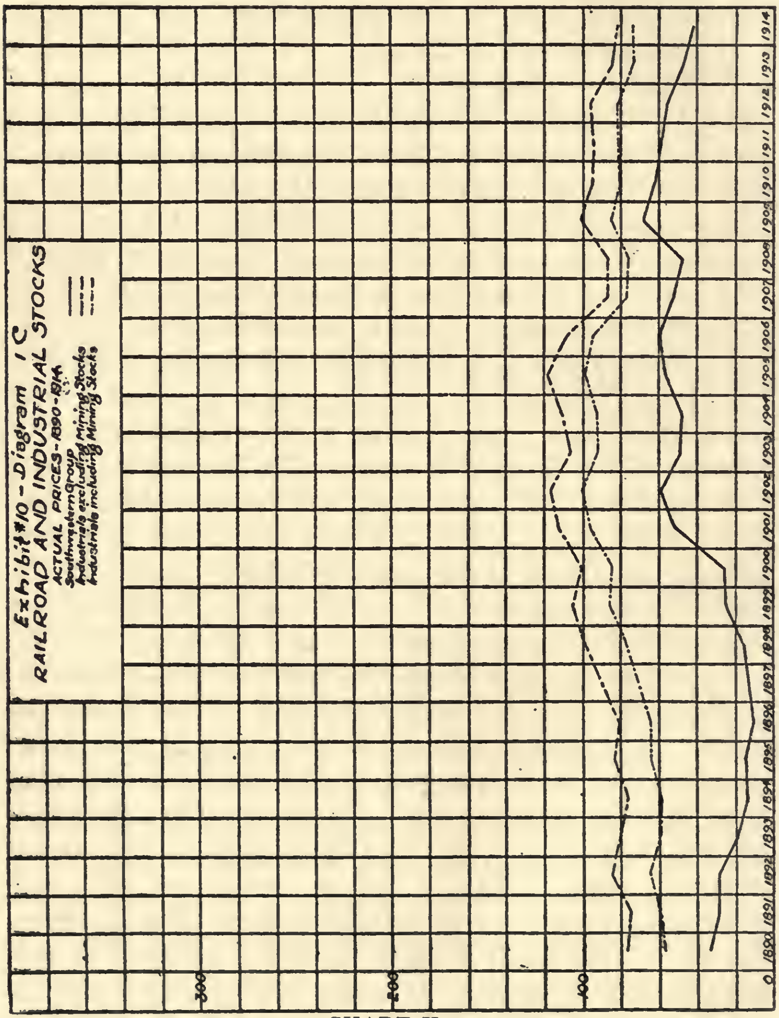


CHART X.

We have brought down to date the market prices on securities that are covered by the current issues of the Wall Street Journal. They have compiled average prices on twenty representative railroads and twelve representative industries during the past seventeen years. We have platted these on a chart shown in Mr. Norton's Exhibit 3 at page 125.

This shows that in 1896 to 1900 the railroad and industrial stocks were close to each other. They approached each other again in 1907. They are closer again in 1914, although the railroads exceeded the industrials in 1914 more than they did in 1907 or in 1896 to 1899. The remarkable fact shown by this table, as has been previously called to the attention of this Commission, is that the average price of representative railroad stock has exceeded the average price of the representative industrial stock for every month of every year from 1896 down to the present time.

These facts about the bonds and stocks of Northwestern and Southwestern railroads reflect the common judgment of the investors of the nation upon the desirability of their securities, whether they are attractive or not. This judgment is not expressed by an interested witness in a law suit, by the railroad president or shipper, but in a far different and more effective manner; it is expressed by the action of men who go into their pockets and back up their judgment with hard cash, piling it up into sums aggregating hundreds of millions of dollars annually. In hard, unyielding, conclusive terms these men have said in the market places of the country that the securities of the Northwestern group of railroads, as a class, are more desirable than the securities of other public service, industrial and manufacturing companies, and that the securities of the Southwestern railroads have been making very substantial progress.

What better judge can you ask as to whether these railroad securities are attractive or not, than the investor himself? The price at any given moment on a particular thing may be fixed by the speculator. He is trying to guess what the permanent investor is about to do. But the range of prices over a long period of time on a representative list of securities is fixed by the judgment of the investor. In clear, unmistakeable language the investors of the United States have testified that railroading in the Northwestern part of the United States is more profitable than any other line of business of a well established character, in the country. These Northwestern bonds sell on the market at higher figures than the bonds of a like character carrying a like rate, of other public service and industrial companies. The credit of our Northwestern railroad companies, as a whole, ranks far better than those companies engaged in street railway, gas, electric light, telegraph, telephone, manufacturing and industrial pursuits. The proper place to go to find out whether these investments are desirable is to go where the keenest and shrewdest representatives of the country are engaged in making investments. There we find these securities, as a class, are more desirable and command higher prices than those of any other class of securities on the market, outside of Government bonds. While the Southwestern railroads do not rank so high, yet we find they have been getting on a more solid and substantial basis than in former years.

III.

THE NET REVENUES OF THESE CARRIERS ARE ADEQUATE, AS PROVED IN THIS CASE, AND JUDGED BY THE STANDARDS WHICH HAVE BEEN ESTABLISHED IN THE PAST BY THE UNANIMOUS ACTION OF THIS COMMISSION.

TENDENCIES OF EARNINGS.

The records of the market place we have been considering, reflect other facts, which are easily ascertained from the reports of the Commission, and of the various railway companies to their stockholders. Credit is a sort of corollary of, and dependent upon profits. If a company's credit is good that is generally because of its profits, both present and prospective, are good.

If we were permitted to choose the companies we could prove that any industry in this country was unprofitable. Failures are everywhere. We are more concerned with representative companies, which handle the bulk of the business. The average company in the oil business during the past twenty years has been a failure, but the oil industry has been profitable. The standard adopted by Mr. McCrea, former president of the Pennsylvania Railroad company in 1910, is the proper one—the properly managed, properly capitalized company, operating where properly needed. For the purpose of observing the tendency of freight traffic conditions in Western territory we will select the two representative companies which Mr. Commissioner Lane stated were typical in the 1910 case—Chicago, Burlington & Quincy, and Atchison, Topeka & Santa Fe. We will add to these the Chicago & North Western, a company that has taken such a leading

part in the present proceedings; a company over 90% of whose mileage is in the territory directly involved in this case.

It will become more apparent as we proceed, that the variations in rules of accounting, the differences in traffic conditions, etc., etc., necessitate the analysis of one or more given companies, themselves, in order to reach any intelligent conception as to the value of consolidated figures for any particular territory.

The only other occasion when the adequacy of western freight rates has been determined by this body in the history of these railroads, was in the decision rendered February 22, 1911, in the proceeding known as the Western Advance Rate Case. In a mastery discussion of principles contained in that decision, doctrines were announced that will be quoted and requoted, in decisions of commissions and courts for many years to come. Mr. Lane did not adopt a fixed formula. The Commission considered the trend of earnings over an extended period of time, and largely based its conclusions upon that showing.

In 1890 the application of a 7½% return as the minimum on outstanding capital stock, would have resulted in an advance in freight rates adequate to make an increase of 65% in their net corporate income. Instead of increasing their rates, they decreased them. The carriers have not suffered. They have grown enormously.

In 1895, close to the panic, we find the rate of return on book value of the properties in the Northwestern group at the lowest ebb since 1890; the lowest it had been for six years. Now if an application by the carriers had been made for an advance, and the tendency theory, so strongly and urgently advocated by the carriers in this proceeding, had been adopted, we would have had a general advance in freight rates; but it was not necessary and

the carriers have grown and prospered more since then, than ever before. The tendency for a short period, five or six years, is as unsafe a test as any that can possibly be conceived. Had that test been invoked in 1908, we would again have had a general advance. The average rate on book value at that time was at the lowest ebb it had reached in the Northwestern group of railroads for seven years. No general advance was permitted. Their net income has increased $30,000,000 since 1908.

RETURN ON BOOK VALUE.

It is commonly known that the rates on money were higher in the early 90's than they are today. If 7% had been urged as a proper return on book value in 1890 and as a justification for an advance in freight rates, consider what would have happened. In the Northwestern group of railroads you would have authorized an increase in net operating income of one-half the return at that time, or $26,000,000, whereas during the next ten years there was an actual decline of 25% in their freight rates. That has remained true to the present time with slight increases in the country as a whole. That lower plane of freight rates in this country has earned vastly more for the stockholders owning their railroads, than the higher plane existing in 1890. The stockholder in the Northwestern group of railroads is earning practically twice as much on his stock today as he did then. It would be a piece of gross folly and unpardonable injustice to the American public to have inflicted such a burden upon them; and yet that argument, if true, would have justified an advance of that character at that time. Without any increase in rates, we find a steady upward sweep in net revenues from $52,000,000 to $87,000,000 in 1900, and then increasing practically another 100% in 1914, accompanied by regular increases of even a greater amount, to the carriers themselves.

A 4% or a 5% return on book value proves nothing, until you know what that book value is. You yourselves have unanimously discredited that as any factor worthy of confidence.

After all things are considered, taking a broad perspective over an extended period of years is the safer, wiser course than the adoption of any fixed percentage, or rule of thumb, at any given time. Under the existing level of rates more than half of the railroad property in this territory has been constructed. Bonds of these companies are more attractive than those of companies engaged in any other line of business in the United States, and their stocks are earning over 8% as a whole, including the weak lines and the poor lines. These rates have been adequate to produce this result, and yet the application of any of the other tests that have been suggested would have cost the consuming and shipping public hundreds of millions of dollars during the past twenty-five years. A well-balanced analysis of the trend of affairs over an extended period of time, with full recognition of the basic principles that are involved, is probably the wisest course to pursue.

INCREASE IN EARNINGS AND DENSITY OF TRAFFIC.

It is unfair to take any period of three or four months, or years, as typical of the general tendency in any industry. With such an absurd method as that, at several times since this Commission has been keeping records, you could prove most of the railroads in the country were rapidly growing toward bankruptcy; then at another time you could prove that they would ultimately absorb all the wealth of the world. The general trend over a series of years is the only safe indication of tendencies.

The accompanying table presents the consolidated figures for the entire Western District, as classified by the Interstate Commerce Commission:

TENDENCY OF REVENUES AND EXPENSES.
INCLUDING TAXES.
WESTERN DISTRICT.*

Year	Gross revenues	Increase over year 1890	Operating expenses and taxes	Increase over year 1890	Net revenue less taxes	Increase over year 1890
1890	$ 423,209,441		$288,133,355		$135,076,086	
1891	448,861,601		312,907,224		135,954,377	
1892	490,668,334		334,254,317		156,414,017	
1893	508,126,219		353,609,629		154,516,590	
1894	439,706,068		313,772,189		125,933,879	
Average	$ 462,114,333	9.19%	$320,535,343	11.25%	$141,578,990	4.81%
1895	$ 428,272,466		$302,710,863		$125,561,603	
1896	466,338,385		321,809,506		144,528,879	
1897	459,728,683		318,955,122		140,773,561	
1898	533,674,836		354,513,052		179,161,784	
1899	567,489,935		374,637,822		192,852,113	
Average	$ 491,100,861	16.04%	$334,525,273	16.10%	$156,575,588	15.92%
1900	$ 635,100,194		$414,907,221		$220,192,973	
1901	689,610,858		450,727,145		238,883,713	
1902	758,089,224		490,415,007		267,674,217	
1903	822,744,530		543,284,375		279,460,155	
1904	856 967,938		582,810,033		274,157,905	
Average	$ 752,502,549	77.81%	$496,428,756	72.29%	$256,073,793	89.58%
1905	$ 906,276,861		$606,689,623		$299,587,238	
1906	1,019,670,079		674,766,087		344,903,992	
1907	1,162,122,423		777,987,339		384,135,084	
1908	1,079,504,017		767,527,160		311,976,857	
1909	1,114,242,403		758,687,196		355,555,207	
Average	$1,056,363,157	149.61%	$717,131,481	148.89%	$339,231,676	151.14%
1910	$1,263,531,852		$881,847,670		$381,684,182	
1911	1,155,984,164		818,958,515		337,025,649	
1912	1,155,536,006		833,844,241		321,691,765	
1913	1,244,905,399		878,777,438		366,127,961	
1914	1,211,343,474		883,863,685		327,479,789	
Average	$1,206,260,179	185.03%	$859,458,310	198.28%	$346,801,869	156.75%

*Prior to 1911 figures for Groups VI, VII, VIII, IX and X, Interstate Commerce Commission's accounting divisions, were added together in order to obtain comparable figures for Western District, present I. C. C. accounting division. Returns for switching and terminal companies were eliminated for years 1908-1909-1910 and 1911, but as in 1912 such companies in the Western District comprised but 0.41% of single track mileage and 1% of all track mileage, their elimination has little effect upon averages and percentages given in this table.

The credibility to be attached to the railroad complaints so constantly made about the disastrous effects of regulation, can be tested by a consideration of the accompanying table so far as such criticisms are just with reference to Western railroads. There have been failures in the railroad business, as in all other industries; but we must consider the situation as a whole.

The Commission commenced operations about 1888, but the accounts did not reach stable form until 1890, so we have in the accompanying table a comprehensive review of just what the existence of the Interstate Commerce Commission and State and Federal regulation has meant to our Western railroads.

There is always an ebb and flow in the railroad business, as well as in all other industries. It will be noted from the foregoing table that at times the net revenues declined for a period of years, after which they recovered. For instance, in 1912 they were less than for any of the three preceding years, but the following year they were greater than in any preceding year since 1890, excepting only 1910 and 1907.

The net revenues as a whole of these Western railroads in 1914 during the year of depression was $100,000,000 greater than in 1900, and it exceeded the net revenues of 1890 by almost $200,000,000.

In the entire territory between the Mississippi River and the Pacific Coast, the following railroads earned from 6 to 78% on all their capital stock outstanding in the hands of the public.

Chicago, Burlington & Quincy	earn	16. %
Chicago, Milwaukee & St. Paul	"	6.7%
Atchison, Topeka & Santa Fe..........	"	6.5%
Southern Pacific	"	14.8%
Chicago & North Western	"	8.1%
Great Northern	"	8.3%

Union Pacific	"	10.4%
St. Louis, Iron Mountain & Southern..	"	6.4%
Minneapolis, St. Paul & Sault Ste. Marie	"	7.5%
Northern Pacific	"	8.0%
Oregon Short Line	"	9.7%
El Paso & Southwestern	"	8.0%
Duluth, Missabe & Northern	"	56.7%
Duluth & Iron Range	"	78.0%
Louisiana Western	"	14.3%
Bingham & Garfield	"	44.7%
Butte, Anaconda & Pacific	"	11.8%
Florence & Cripple Creek	"	10.2%
Arizona & New Mexico	"	11.9%
Chicago, St. Paul, Minneapolis & Omaha	"	6.8%
Nevada Northern	"	35.9%

These companies, earning from 6 to 78% handle 75% of the traffic between the Mississippi River and the Pacific Coast. The roads serving this entire Western territory from the Mississippi River west, as a whole, had a total net corporate income amounting to over 6.24% on all their capital stock. This includes the rich roads and the poor roads, the weak and the strong, and includes the capital stock of all such roads as the Chicago & Alton, Missouri Pacific, Missouri, Kansas & Texas, Northern Pacific, etc.

There is a great deal of water in this stock. Much of it was given away as a bonus, and never did represent any substantial investment. The average rate earned in this stock for the last year officially reported, 1913, was double what it was sixteen years ago and five times as great as it was twenty-five years ago.

TENDENCY OF CAPITAL STOCK, NET CORPORATE INCOME.
AND RETURN ON CAPITAL STOCK.
WESTERN DISTRICT.*

Year	Capital Stock Out	Increase over year 1890	Net Corporate Income	Increase over year 1890	Per cent return on capital stock out	Increase over year 1890
1890	$2,187,193,476		$ 22,513,344		1.03	
1891	2,136,874,678		32,002,814		1.50	
1892	2,240,349,703		35,061,872		1.57	
1893	2,241,637,602		34,477,322		1.54	
1894	2,303,939,803		6,794,100		0.29	
Average	$2,221,999,052	1.59%	$ 26,169,890	16.24%	1.18	14.56%
1895	$2,332,604,960		@$ 2,600,863		....	
1896	2,502,626,989		23,793,611		0.95	
1897	2,612,235,440		24,047,879		0.92	
1898	2,623,848,638		62,785,631		2.39	
1899	2,696,697,033		77,081,335		2.86	
Average	$2,553,602,612	16.75%	$ 37,021,519	64.44%	1.45	40.78%
1900	$2,912,502,891		$103,028,134		3.54	
1901	2,933,270,037		113,915,423		3.88	
1902	3,008,760,031		141,872,460		4.72	
1903	3,067,365,903		143,626,332		4.68	
1904	3,133,384,796		136,674,305		4.36	
Average	$3,011,056,732	37.67%	$127,823,331	467.77%	4.25	312.62%
1905	$3,278,859,268		$158,704,204		4.84	
1906	3,412,428,371		201,368,316		5.90	
1907	3,717,040,386		259,654,662		6.99	
1908	3,725,415,001		268,395,810		7.20	
1909	4,006,788,335		238,373,374		5.95	
Average	$3,628,106,272	65.88%	$225,299,273	900.74%	6.21	502.91%
1910	$4,231,893,209	93.49%	$284,893,379	1,165.44%	6.73	553.40%
1911	4,068,622,336	86.02%	286,370,576	1,172.00%	7.04	583.50%
1912	4,121,502,435	88.44%	192,664,771	755.78%	4.67	353.40%
**1913	4,017,449,629	83.68%	250,621,931	1,013.22%	6.24	505.83%

@—Deficit.
*—Prior to 1911 figures were accumulated for Groups VI, VII, VIII, IX and X.

Note—Figure for "Net Corporate Income" for years prior to 1908 is that shown as "Net Income" on table entitled "Condensed Income Account, by Groups" in the text of the Annual Statistical Reports of the Interstate Commerce Commission. Several changes in classification of accounts were made in 1908, but which in the aggregate do not materially affect the net result shown.

Authority: Annual Statistical Reports of the Interstate Commerce Commission.

**—Figures for roads whose annual operating revenues exceed $1,000,000.

This concludes our discussion of the Western district as a whole.

The Western district, as classified by the Interstate Commerce Commission, roughly speaking, extends from Chicago and the Mississippi River to the Pacific Coast, and from the southern boundary of Canada to Mexico, embracing over three-fourths of the territory of the United States.

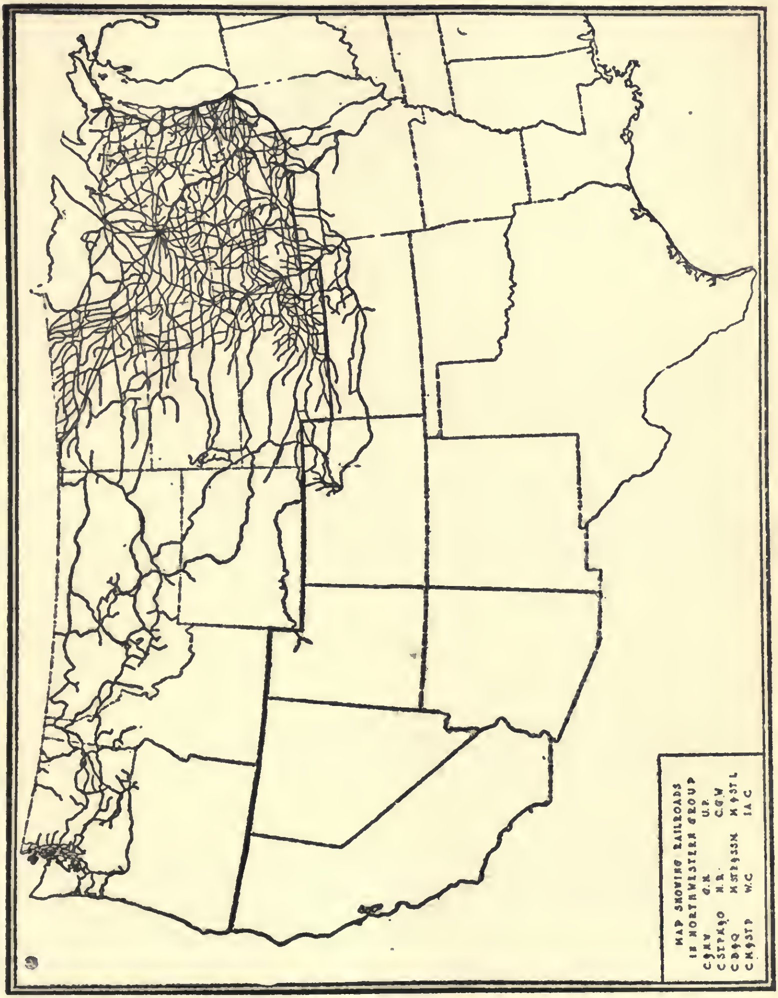
These railroads as a whole from the Mississippi Valley to the Pacific Coast have been and are now seeking a general increase in their revenues by various methods. They are decreasing transcontinental rates, and increasing all other rates wherever they are able to do so. Consequently it would probably be fair for the Commission to consider the territory as a whole were it not for the fact that there are extraordinary differences in conditions in one portion of this vast territory compared with another. The differences between Arizona and Illinois are greater than those between New York and Florida.

In the present proceeding it is also true that the bulk of the advances are from points located east of the Rocky Mountains. In this territory also there are widely different conditions in the traffic handled and in the financial status of the railroads concerned. In recognition of this situation, we have divided the territory into three groups, the Northwestern, the Southwestern, and Western Trunk Line, which have been fully described.

There have been many changes in the accounting rules and in the policies of the railroads that cannot possibly be critically considered by an arithmetical sum of figures applicable to a miscellaneous list of companies. The methods of accounting differ with different companies; that alone demands a separate analysis of a few representative carriers in the territories we have described, as well as the summaries for a series of railroads serving any particular territory.

We will now proceed to state briefly the tendencies of returns on capitalization as a whole, as well as net revenues and gross revenues as a whole in these territories. This will be supplemented by a somewhat extended analysis and application of the other tests to which we have referred above.

The railroads in the Northwestern group, covered by this table are shown on the accompanying chart.



The accompanying table shows the book value, total capitalization and earnings of the railroads in the Northwestern group.

1915 WESTERN ADVANCE RATE CASE, I. & S. DOCKET 555.
OPERATING RETURNS OF RAILROAD SYSTEMS IN NORTHWESTERN GROUP WESTERN CLASSIFICATION TERRITORY. 1890 TO 1914

Year 1	Book Value 2	Net Operating Income 3	Ratio of Net Operating Income to Book Value 4	Total Capitalization Outstanding 5	Corporate Income, Including Interest 6	Ratio of Corporate Income to Total Capitalization Outstanding 7	Capital Stock Outstanding 8	Net Corporate Income 9	Ratio of Net Corporate Income to Capital Stock Outstanding 10
1890	$ 1,110,186,460	$ 52,121,752	4.69	$ 1,066,830,390	$ 52,351,491	4.91	$ 447,627,148	$ 20,258,122	4.53
1891	1,144,373,831	53,157,198	4.65	1,095,209,055	52,030,176	4.75	453,819,719	18,147,957	4.00
1892	1,169,865,261	62,709,486	5.36	1,187,796,497	61,920,706	5.21	463,843,122	26,524,580	5.72
1893	1,224,486,531	60,545,424	4.94	1,207,177,525	59,100,418	4.90	503,059,147	22,646,214	4.50
1894	1,264,574,216	50,251,870	3.97	1,270,368,438	48,087,842	3.79	516,422,480	10,266,376	1.99
Totals—Avgs. 5 yrs.	$ 5,913,486,299	$ 278,785,730	4.71	$ 5,827,382,705	$ 273,490,633	4.69	$ 2,384,771,616	$ 97,843,249	4.10
1895	$ 1,288,799,679	$ 47,875,973	3.71	$ 1,277,918,578	$ 44,863,601	3.51	$ 518,819,867	$ 6,577,761	1.27
1896	1,285,422,932	59,091,725	4.60	1,275,476,240	58,784,442	4.61	519,483,725	20,927,429	4.03
1897	1,387,303,041	56,058,938	4.04	1,365,457,668	55,678,694	4.08	592,911,294	19,993,571	3.37
1898	1,465,102,276	72,292,482	4.93	1,407,111,425	72,439,092	5.15	671,350,529	39,131,184	5.83
1899	1,502,080,223	80,543,517	5.36	1,510,109,865	84,523,294	5.60	776,877,697	50,159,184	6.46
Totals—Avgs. 5 yrs.	$ 6,928,708,151	$ 315,862,635	4.56	$ 6,836,073,776	$ 316,289,123	4.63	$ 3,079,443,112	$ 136,789,129	4.44
1900	$ 1,516,263,995	$ 87,168,366	5.75	$ 1,590,913,963	$ 94,360,026	5.93	$ 831,817,930	$ 59,933,167	7.21
1901	1,602,863,663	89,637,742	5.59	1,739,339,090	94,529,667	5.43	869,323,620	58,370,994	6.71
1902	1,635,141,756	107,571,914	6.58	2,004,355,501	113,825,090	5.68	907,713,518	73,079,758	8.05
1903	1,724,651,693	116,026,569	6.73	2,045,722,871	120,541,684	5.89	931,261,813	80,264,250	8.62
1904	1,764,561,747	115,075,944	6.52	2,085,102,042	120,953,103	5.80	932,057,913	79,961,124	8.58
Totals—Avgs. 5 yrs.	$ 8,243,482,854	$ 515,480,535	6.25	$ 9,465,433,467	$ 544,209,570	5.75	$ 4,472,174,794	$ 351,609,293	7.86
1905	$ 1,789,669,331	$ 124,608,658	6.96	$ 2,099,495,630	$ 131,705,507	6.27	$ 1,003,885,388	$ 91,164,560	9.08
1906	1,832,268,625	142,372,737	7.77	2,170,030,881	147,526,021	6.80	1,100,486,580	109,226,963	9.93
1907	1,916,094,568	140,686,492	7.34	2,217,754,188	158,194,062	7.13	1,147,787,065	119,863,746	10.44
1908	2,101,345,766	126,072,425	6.00	2,523,913,661	181,068,426	7.17	1,214,369,315	123,403,955	10.16
1909	2,156,461,489	139,163,350	6.45	2,778,550,311	173,954,072	6.26	1,407,407,488	113,186,305	8.04
Totals—Avgs. 5 yrs.	$ 9,795,839,779	$ 672,903,662	6.87	$ 11,789,744,671	$ 792,448,088	6.72	$ 5,873,935,836	$ 556,845,529	9.48
1910	$ 2,328,412,139	$ 144,050,152	6.19	$ 2,799,251,801	$ 191,040,562	6.82	$ 1,440,619,155	$ 132,967,219	9.23
1911	2,414,158,229	137,011,360	5.68	2,940,793,660	184,289,112	6.27	1,443,996,575	123,192,696	8.53
1912	2,478,012,660	132,757,532	5.36	3,005,390,851	176,767,674	5.88	1,444,303,487	113,358,642	7.85
1913	2,754,252,417	164,634,718	5.98	3,114,859,415	210,016,550	6.74	1,457,250,748	143,132,412	9.82
1914	2,902,423,002	156,629,214	5.40	3,212,601,497	195,895,310	6.10	1,482,517,045	124,316,804	8.39
Totals—Avgs. 5 yrs.	$ 12,877,258,447	$ 735,082,976	5.71	$ 15,07[illegible]97,224	$ 958,009,208	6.36	$ 7,268,687,010	$ 636,967,773	8.76
Totals—Avgs. 25 yrs.	$ 43,758,775,530	$ 2,518,115,538	5.75	$ 48,991,531,843	$ 2,884,446,622	5.89	$ 23,079,012,368	$ 1,780,054,973	7.71

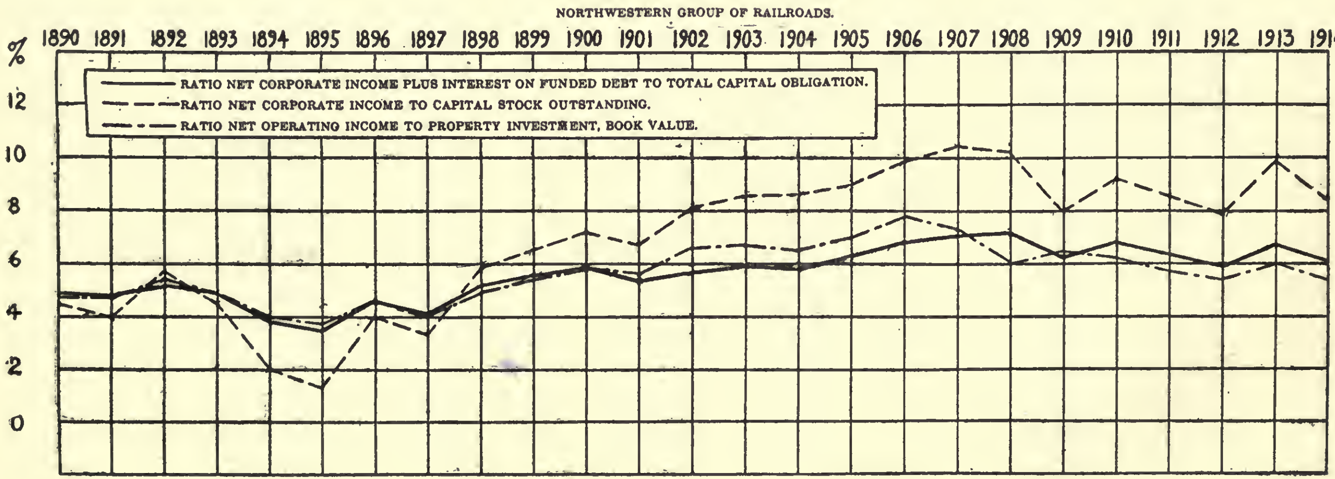
Authority: Compiled from Powell Exhibit No. 2.

Annual Reports to I. C. C.

	Mileage
Chicago & North Western	8,094.94
Minneapolis & St. Louis	1,646.47*
Chicago, Milwaukee & St Paul	9,987.30
Union Pacific	3,615.64
Great Northern	7,802.66
Chicago, Burlington & Quincy	9,263.86
Mpls., St. P. & S. S. M.	4,162.68
Iowa Central	
Chicago, St. P., Mpls. & Omaha	1,752.81
Northern Pacific	6,665.46
Chicago Great Western	1,496.22
Total Mileage	54,488.04

*Includes Iowa Central.

The tendency of the earnings on book value and capitalization in the Northwestern group is indicated by the accompanying chart.



The return on book value and capitalization on the Southwestern group during the 25-year period is given on the accompanying table (L). While the returns are substantially lower than in the Northwestern territory, it will be noticed that in recent years they have been getting onto a slightly higher plane, than formerly.

1915 WESTERN ADVANCE RATE CASE, I. & S. DOCKET 555.
PROPERTY INVESTMENT AND OPERATING RETURNS OF EIGHTEEN RAILROAD SYSTEMS IN SOUTHWESTERN GROUP. WESTERN CLASSIFICATION TERRITORY.
YEARS 1890 TO 1914, INCLUSIVE.

Year 1	Property Investment 2	Net Operating Income 3	Ratio of Net Operating Income to Property Investment 4	Total Capitalization Outstanding 5	Corporate Income Including Interest 6	Ratio of Corporate Income to Total Capitalization Outstanding 7	Capital Stock Outstanding 8	Net Corporate Income 9	Ratio of Net Corporate Income to Capital Stock Outstanding 10
1890	$ 661,259,802.29	$ 25,345,558.39	3.82	$ 730,972,798.73	$ 26,613,421.27	3.64	$ 286,109,075.00	$ 8,325,465.92	2.91
1891	768,064,921.96	24,814,413.61	3.23	765,329,156.05	27,559,353.38	3.60	329,192,850.00	7,728,948.33	2.35
1892	913,302,758.00	27,167,762.91	2.97	967,787,830.17	25,294,351.34	2.61	400,998,300.00	3,607,977.95	.89
1893	933,031,090.85	28,590,956.22	3.06	987,965,715.51	30,710,401.69	3.10	403,648,300.00	7,420,151.18	1.84
1894	945,363,335.51	21,499,926.83	2.27	1,004,193,070.79	23,695,219.66	2.36	406,388,800.00	1,315,710.37-D	.32-D
Totals—Avgs. 5 yrs.	$ 4,221,001,908.61	$ 127,418,617.96	3.02	$ 4,456,248,571.25	$ 133,872,747.34	3.00	$ 1,826,337,325.00	$ 25,760,833.01	1.41
1895	$ 976,537,028.93	$ 20,797,303.48	2.12	$ 1,006,946,955.55	$ 22,741,633.68	2.25	$ 408,015,550.00	$ 2,900,556.90-D	.71-D
1896	1,050,521,221.39	20,893,313.35	1.98	1,083,500,022.18	21,462,416.53	1.98	530,496,225.00	1,054,024.93	.20
1897	1,104,169,388.37	23,052,395.70	2.08	1,132,393,794.83	24,530,685.66	2.16	565,982,152.50	3,240,754.33	.57
1898	1,116,400,650.32	31,153,868.73	2.79	1,145,306,710.06	31,154,350.92	2.72	567,718,544.50	8,785,542.69	1.55
1899	1,127,720,085.82	33,054,623.35	2.93	1,158,801,518.34	36,710,755.60	3.16	567,741,314.50	13,837,228.91	2.44
Totals—Avgs. 5 yrs.	$ 5,375,348,374.83	128,951,504.61	2.40	$5,526,951,000.96	$ 136,599,842.39	2.47	2,639,953,786.50	$ 24,016,993.87	.91
1900	$ 1,162,336,623.35	$ 39,288,730.79	3.38	$ 1,221,140,351.33	$ 47,373,497.78	3.88	$ 600,685,389.50	$ 24,068,436.14	4.01
1901	1,191,418,528.21	50,366,946.43	4.22	1,253,919,921.50	60,183,275.34	4.80	620,535,539.50	32,493,666.48	5.19
1902	1,238,834,874.64	55,769,071.63	4.50	1,371,062,717.99	67,442,856.45	4.92	642,909,309.50	38,535,747.87	5.99
1903	1,291,997,624.84	59,415,853.32	4.59	1,444,413,009.74	71,184,799.95	4.93	665,985,207.30	38,976,965.21	5.85
1904	1,463,731,679.45	57,302,816.15	3.91	1,550,466,546.58	71,713,455.77	4.63	679,929,367.30	35,619,873.58	5.24
Totals—Avgs. 5 yrs.	$ 6,348,319,330.49	$ 262,143,418.32	4.13	$ 6,841,002,547.14	$ 317,897,885.29	4.50	$ 3,210,044,813.10	$ 169,694,689.28	5.29
1905	$ 1,523,656,172.02	$ 59,679,125.08	3.91	$ 1,653,041,239.94	$ 72,182,775.61	4.37	$ 690,520,830.89	$ 31,690,236.37	4.59
1906	1,601,501,880.61	67,722,436.69	4.22	1,746,774,026.44	83,930,379.76	4.81	712,132,970.89	40,871,021.34	5.74
1907	1,658,411,020.52	91,910,709.40	5.54	1,824,851,534.70	102,680,084.14	5.63	720,031,600.89	57,153,818.58	7.94
1908	1,696,081,973.35	69,618,770.67	4.10	1,987,867,173.42	75,591,277.27	3.80	727,489,410.89	26,200,732.32	3.61
1909	1,797,085,557.76	79,066,364.35	4.39	2,043,608,037.20	85,990,565.46	4.21	754,665,983.39	34,742,798.95	4.60
Totals—Avgs. 5 yrs.	$ 8,276,736,613.26	$ 367,997,406.19	4.45	$ 9,256,142,011.70	$ 420,375,082.24	4.54	$ 3,604,840,798.95	$ 191,048,607.56	5.30
1910	$ 1,921,984,503.92	$ 78,915,615.17	4.10	$ 2,217,023,625.27	$ 90,990,010.79	4.10	$ 802,025,733.39	$ 36,209,786.29	4.51
1911	1,995,656,066.87	79,265,274.53	3.97	2,348,764,504.27	85,243,728.53	3.60	817,232,333.89	27,297,508.15	3.34
1912	2,028,156,718.98	77,735,692.03	3.83	2,435,964,861.65	84,527,481.74	3.47	822,195,133.39	23,578,695.64	2.87
1913	2,087,384,580.77	90,595,821.33	4.34	2,431,082,287.44	87,621,021.67	3.60	821,980,533.39	33,241,847.33	3.40
1914	2,115,228,260.00	80,472,822.08	3.80	2,456,879,813.59	85,010,700.88	3.46	836,955,783.39	21,477,975.96	2.57
Totals—Avgs. 5 yrs.	$ 10,148,410,130.54	$ 406,985,225.14	4.01	$ 11,889,715,092.22	$ 433,392,943.61	3.65	$ 4,110,389,517.45	$ 141,805,813.37	3.45
Totals—Avgs. 25 yrs.	$ 34,369,816,357.73	$ 1,293,496,172.22	3.76	$ 37,970,059,223.27	$ 1,442,138,500.87	3.80	$ 15,391,566,239.00	$ 552,332,937.09	3.59

Authorities:
Annual Reports to Interstate Commerce Commission.

D—Indicates deficit.

	Mileage
Atchison, Topeka & Santa Fe Ry.	8,339.72
Chicago, Rock Island & Pac. Ry.	7,852.45
Fort Smith & Western R. R.	221.16
Galveston, Houston & Henderson Ry.	50.00
Kansas City, Mexico & Orient Ry.	259.59
Kansas City Southern	827.17
Midland Valley Ry.	380.18
Missouri, Kansas & Texas Ry.	3,865.07
Missouri & North Arkansas Ry.	365.24
Missouri, Oklahoma & Gulf Ry.	353.47

	Mileage
Missouri Pacific Ry.	3,919.58
St. Louis, Iron Mtn. & Sou. Ry.	3,365.12
St. Louis Southwestern Ry.	943.23
St. Louis Southwestern of Texas	810.50
Morgan's Louisiana & Texas Ry.	404.53
St. Louis & San Francisco R. R.	4,746.32
Texas & Pacific Ry.	1,884.65
Trinity & Brazos Valley Ry.	462.68
Total Mileage	39,050.66

NOTE.—This chart has never been checked and reliance on same is not desired.

We have not had the time to make an analysis of the true situation on the Southwestern lines. These are merely surface figures, as given in their reports, without a close analysis.

Further, it may be stated that we have not had the time to make a check of our summaries previously given for the Southwestern group, and we do not ask that much reliance shall be placed upon the same for that reason, and especially until a more thorough investigation has been made of conditions in the Southwest.

The following tables are similar to those shown in Commissioner Lane's opinion in the Western Rate Advance Case of 1910 and appearing on page 347 of volume 20 of the Commission's reports. Commissioner Lane adopted 4% as the interest rate. Instead of that we took the actual average rate of interest paid last year by each railroad. This made the return on stock slightly lower than it would have been had we taken the straight 4%. We also made a reduction in the net income. Instead of operating income used by Mr. Lane, we made deductions for net rents and lease of roads, which, on each of these four roads reduced the net.

The tables are compiled by ascertaining the net operating income per mile for each of these roads and determining the ratio it bears to an assumed valuation of $40,000, $36,000, and that found by D. F. Jurgensen for each road, per mile of single track, by considering, first, that, the total capitalization of the road was all represented by stock; and, second, that two-thirds of the total capitalization was represented by bonds.

The net operating income used is obtained by deducting from the net revenue for each road each year the expenses of outside operations, taxes and debit balances in the hire of equipment, joint facility, rent, miscellaneous rent, and lease of road accounts and by adding the revenue

from outside operations and credit balances in the hire of equipment, joint facility rent, miscellaneous rent, and lease of road accounts.

For example, the net operating income of the Chicago, Burlington & Quincy for 1914 is shown to be $2,796 per mile, which makes a return on $40,000 value per mile of 7%; but if two-thirds of this value of $40,000 per mile had been borrowed at the actual rate paid by the Burlington in 1914 on its total funded debt and the remaining one-third represented stock issued at par, the stock would have earned 12.8%.

Year	Net Operating Income Per Mile	Return on basis $40,000 per mile, single track			Return on basis $36,000 per mile, single track			Return on Jurgensen's per mile valuation as of June 30, 1914			
		All stock	Two-thirds bonds	One-third stock	All stock	Two-thirds bonds	One-third stock	All stock	Two-thirds bonds	One-third stock	Jurgensen's valuation per mile present cost depreciated, including general expenditures
CHICAGO, BURLINGTON & QUINCY.											
		%	%	%	%	%	%	%	%	%	
1911	$2,716	6.8	4.18	12.2	7.5	4.18	14.3	7.7	4.18	14.8	
1912	2,402	6.0	4.18	9.8	6.7	4.18	11.7	6.8	4.18	12.1	
1913	2,999	7.5	4.18	14.4	8.3	4.18	16.6	8.5	4.18	17.2	
1914	2,796	7.0	4.18	12.8	7.8	4.18	14.9	8.0	4.18	15.5	$35,142
CHICAGO & NORTH WESTERN.											
1911	$2,292	5.7	4.30	8.7	6.4	4.30	10.5	7.5	4.30	14.0	
1912	2,101	5.3	4.30	7.2	5.8	4.30	8.9	6.9	4.30	12.1	
1913	2,532	6.3	4.30	10.5	7.0	4.30	12.5	8.3	4.30	16.3	
1914	2,346	5.9	4.30	9.1	6.5	4.30	11.0	7.7	4.30	14.5	$30,483
CHICAGO, MILWAUKEE & ST. PAUL.											
1911	$1,756	4.4	3.98	5.2	4.9	3.98	6.7	5.5	3.98	8.6	
1912	1,497	3.7	3.98	3.2	4.2	3.98	4.5	4.7	3.98	6.1	
1913	3,076	7.7	3.98	15.4	8.5	3.98	17.7	9.7	3.98	21.0	
1914	2,738	6.9	3.98	12.8	7.6	3.98	14.9	8.6	3.98	17.8	$31,844
ATCHISON, TOPEKA & SANTA FE.											
1911	$3,826	9.6	4.03	21.1	10.6	4.03	23.8				
1912	3,550	8.9	4.03	18.9	9.9	4.03	21.5				
1913	3,595	9.0	4.03	19.3	10.0	4.03	21.9				
1914	3,373	8.4	4.03	17.6	9.4	4.03	20.1				

CHICAGO & NORTH WESTERN RAILWAY COMPANY.

The North Western Railway is leading the present fight for advances in freight rates. This makes an analysis of its operating and financial condition of peculiar significance.

The North Western Railroad is a representative line, in that it has a large amount of both main line and feeders that lie in the direction in which the traffic moves, and reaches the chief terminal in this part of the country, Chicago. Over 90% of the mileage of the North Western is located within the states of Iowa, Minnesota, Nebraska, North Dakota and South Dakota.

During the year 1913 the net corporate income of this company above all charges, including expenses, taxes and interest, amounted to $14,800,000, yielding a return of 9.76% on all its capital stock outstanding. Last year, during the period of depression, it earned over $12,000,000 net corporate income, amounting to 8% on all its capital stock outstanding in the hands of the public (Powell Exhibit 2, page 5). That these returns were quite attractive to investors is evidenced by the fact that the bonds of this company sold on the market at a yield of less than 5% during 1914, with the exception of one sinking fund which went .2 of one per cent above. The stocks of the North Western sold for 131 (Norton Exhibit 3, Vol. 1, pages 5, 128).

The accompanying table, showing the freight revenue and train loading for the North Western, pictures in a striking manner the progress this company has been making during recent years.

Since 1900 its freight revenue has increased 77%. Its train load only increased 44 tons from 1900 to 1912. In the last two years its train load has increased 49 tons. During the past two years there has been more of an in-

CHICAGO & NORTH WESTERN.

Year	Freight Revenue including switching	Revenue ton miles per mile of road	Revenue tons per train mile
1890	$19,786,220	$477,983	$138.10
1891	19,908,551	455,024	134.10
1892	23,219,377	538,624	141.78
1893	23,026,865	525,905	132.16
1894	21,131,679	389,990	122.68
1895	19,555,715	341,461	116.78
1896	24,773,452	482,151	140.36
1897	22,247,856	453,337	152.98
1898	26,988,408	597,017	193.08
1899	28,853,237	650,819	208.93
1900	31,919,796	691,976	254.61
1901	31,605,650	664,453	255.08
1902	33,530,673	693,823	267.12
1903	35,612,459	548,872	249.62
1904	36,849,498	548,606	244.59
1905	38,861,229	579,424	259.45
1906	45,296,131	691,758	285.91
1907	48,576,404	712,165	271.36
1908	42,836,539	633,765	261.38
1909	44,525,000	636,765	260.13
1910	50,562,949	729,100	260.71
1911	50,168,617	701,713	276.54
1912	48,057,471	646,526	298.94
1913	55,970,944	787,734	347.97
1914	55,321,350	769,610	347.61

crease in the train load than during the preceding twelve years. In 1912 the train load was only 299 tons, while the Chicago, Burlington & Quincy was 438 tons. It would appear that proper economies should have been introduced at an earlier date. Notwithstanding that fact the North Western has earned splendid returns.

The accompanying table showing operating revenues demonstrates that fact.

CHICAGO & NORTH WESTERN.

Year	Single Track Mileage Operated	Operating Revenues	Operating Expenses	Net Operating Revenue	Total Maintenance
1890	4,254.92	$27,252,899	$16,801,045	$10,451,854	$ 6,304,815
1891	4,273.54	27,930,195	17,291,239	10,638,956	6,293,033
1892	4,273.54	31,885,314	19,253,416	12,631,898	7,266,557
1893	4,273.54	32,509,312	20,718,532	11,790,780	7,779,443
1894	5,030.78	31,489,948	19,385,263	12,104,685	6,702,680
1895	5,030.78	28,098,148	17,109,938	10,988,210	5,663,466
1896	5,030.78	33,889,411	20,529,658	13,359,753	8,512,359
1897	5,030.78	30,864,606	18,419,537	12,445,069	6,980,509
1898	5,085.62	36,055,846	22,523,374	13,532,472	9,249,831
1899	5,085.62	38,764,378	23,823,748	14,940,630	9,902,700
1900	5,571.23	42,964,470	25,693,001	17,271,469	9,990,146
1901	5,585.53	43,256,721	25,778,694	17,478,027	9,459,500
1902	5,930.26	46,764,196	28,553,186	18,211,010	10,820,685
1903	7,365.63	50,290,804	31,305,616	18,985,188	11,412,704
1904	7,411.77	52,804,428	34,646,822	18,157,606	12,589,235
1905	7,408.13	55,177,925	35,561,778	19,616,147	13,812,240
1906	7,453.58	62,830,896	39,199,833	23,631,063	15,815,500
1907	7,622.91	68,160,690	44,133,214	24,027,476	17,505,184
1908	7,632.23	63,219,344	.41,630,035	21,589,309	14,806,401
1909	7,637.97	65,978,471	43,191,239	22,787,232	16,268,234
1910	7,629.39	74,175,685	52,153,619	22,022,066	19,923,555
1911	7,743.48	74,918,186	53,012,710	21,905,476	19,309,269
1912	7,960.45	73,698,592	52,701,843	20,996,749	18,938,574
1913	7,975.94	83,035,921	58,252,780	24,783,141	23,069,683
1914	8,094.94	83,677,051	59,405,142	24,271,909	24,366,813

The net operating revenue of the North Western in 1913 was $24,700,000, being greater than in any other year for which we have records. In 1914 it fell off half a million, but it was still greater than in any other year excepting

1913, only. In 1913 the North Western increased its maintenance to a figure that is $4,000,000 greater than in preceding years; an increase of over 20%. Not content with that, the following year, 1914 (the year of depression), they increased their maintenance another $1,300,000, even over the high year of 1913.

The accompanying table shows how the people have fared who have invested their money in the North Western property. They have not passed a dividend in the last twenty-five years.

CHICAGO & NORTH WESTERN.

Year	Rate of dividend Common	Rate of dividend Preferred	Rate of Interest
1890	6.00	7.00	5.54
1891	6.00	7.00	5.24
1892	6.00	7.00	5.34
1893	6.00	7.00	5.29
1894	6.00	7.00	5.28
1895	4.00	7.00	5.32
1896	5.00	7.00	5.37
1897	5.00	7.00	5.36
1898	5.00	7.00	5.26
1899	5.00	7.00	5.19
1900	6.00	7.00	4.93
1901	6.00	7.00	4.85
1902	7.00	7.00	4.85
1903	7.00	8.00	4.79
1904	7.00	8.00	5.12
1905	7.00	8.00	5.12
1906	7.00	8.00	5.14
1907	7.00	8.00	5.09
1908	7.00	8.00	5.10
1909	7.00	8.00	4.73
1910	7.00	8.00	4.95
1911	7.00	8.00	4.57
1912	7.00	8.00	4.37
1913	7.00	8.00	4.41
1914	7.00	8.00	4.30

The rate of dividends fell in 1895 to 4%; they had been 6% in 1890. It did not take a general advance in freight rates to recover from the period of depression at that

time, when these companies were not so thoroughly blest with public regulation as they are today.

While the return in cash dividends to the stockholders annually has increased on the North Western, its interest charges have declined.

By looking at Powell Exhibit No. 2, page 5, it will be noted that there has been a decline in the average rate of net operating income to book value since 1906. If the accounts were kept on the same basis, and there was the same amount of new construction being made constantly from year to year, and if the North Western had excluded from its property investment all property upon which it was not entitled to rely, in demanding an advance in freight rates, that situation would be significant.

It is undisputed, however, in this record:

First, that the property investment is not compiled upon the same basis since 1906 as in former years; and,

Second, its operating expenses are not compiled since 1906 on the same basis as in former years.

By careful analysis we have found by the testimony of Mr. Chambers that this company has expended over $12,-000,000 out of operating expenses during the past seven years in improving its property.

The most important fact in connection with the North Western is the remarkable amount of new construction. Since 1907 this company has increased its property $110,-000,000, almost 50% in seven years.

The average age of this new property that the North Western has acquired since 1907 is less than three years. This average age is computed by using the fiscal year of 1914 as the base, and assuming that property constructed that year had an average age of six months during the year; the property constructed the previous year an age of one year, and so on, for preceding years.

No person with any practical acquaintance with American railroading would expect a vast property costing over $100,000,000, less than three years of age on an average, to yield a return the same as on a well-seasoned railroad from twenty to fifty years of age.

The constant close relationship between the increase or decrease in rate of return and the increase or decrease in property is very striking. Making due allowance for the panic year, let us review that trend.

In 1890 there was a property investment of $155,000,000 and a return of 6.19%. Up to and including 1893 the annual increase in the property is very slight, amounting to less than $4,000,000 in each instance, and the rate of return remains practically constant, in 1893 it being practically the same as it was in 1890. Then came the panic year; there is an increase in the property of $14,000,000 and a slight decline in the rate of return. The following year there was an additional decline in return because of the general financial situation. The next year the property is reduced and the rate of return increased. The next year a slight increase in property and the rate of return quite constant. The same for 1898. In 1899 the property remains practically the same, while the rate of return shows a substantial increase. In 1900 the property increased less than $5,000,000 and there is a very substantial increase in the rate. The next year there is a slight increase in the property and a slight decline in the rate; the next year a slight increase in the property and an increase in the rate. The next year an increase in the property of $28,000,000, accompanied by a decline in the rate for that year and the next year. In 1905 the property remained constant and there is a slight increase in the rate of return. In 1906 there is a $7,000,000 increase in the property and a substantial increase in the rate of return. In 1907 an increase of $11,000,000 in the property, with a decline in the rate of return. In 1908 we have the panic year again and a decline in the return. In 1909

there is an increase of $9,000,000 in the property, accompanied by a rate practically the same. In 1910 there is an increase in the property of $30,000,000. This is accompanied by a decline in the rate of return. The next year there is another large increase in the property, amounting to $13,000,000, accompanied by a decline in the rate of return. The next year there is an increase of $18,000,000 in the property, accompanied by a decline in the return; the next year an increase of $10,000,000 in the property, accompanied by a slight increase in the rate; the next year another large increase in the property of $22,000,000, accompanied by a decline in the return.

Summarizing the entire period we find from 1890 to 1906, an average increase in property per year of about $4,500,000, and a constant increase in the rate of return on property, varying from time to time almost exactly with the large or small increase in the property. From 1906 to 1914 there was an increase of $120,000,000, in the property, an average of $15,000,000 per year, accompanied by a decline in the rate, except for those years when the increase in the property is slight, at which time the rate of return immediately recovers, and starts forward.

Wherever there is a large new construction in progress there is a corresponding large increase in maintenance expense, which includes the labor and other items connected with those betterments and improvements. Such a situation would enable a company to make the net income very small indeed in the most prosperous years of the system. In Mr. Chambers' computations, where he demonstrated $12,000,000 charges of that character directly connected with improvements of the North Western property, and in entire excess over the preceding seven-year period, ~~He~~ he made adequate allowance for increases in cost of labor and increase in the size and efficiency of the equipment.

This increase is a betterment or improvement on the property, paid for out of operating expenses, which Mr.

Felton, the President of the Great Western, and Mr. Bush, the President of the Missouri Pacific, both stated on the stand could be done, and had been done by various railroads in this section of the country.

Another important change relates to the charging of additions and betterments out of surplus, to property investment after 1907, according to the ruling of the Commission. It is quite difficult to find out how many additions and betterments have been charged to surplus. However, taking the surplus earnings that were available for this purpose between the years 1907 and 1914 inclusive, we know that the North Western has had approximately $28,000,000 in funds of that character, available for that purpose, and further we know that the company has spent that much more for new property. Prior to 1908 the rules did not require it to charge such additions and betterments to property. Here is another important change in the accounts that alters the base figures and consequently invalidates the comparisons to that extent.

The addition of the depreciation account to operating expenses also occurred in 1908.

We find the North Western has been keeping its accounts differently from the Burlington. A part of the depreciation charges in the case of the North Western we believe is proper and Mr. Chambers so allowed it. This situation we also find quite different from that on the Santa Fe Railroad.

It may seem that perhaps the rise and fall in return on a property, compared with new construction described above, merely presents a series of coincidences, and that the change in the accounting rules of the Commission simply happened to occur at the particular time when the tide turned in the prosperity of the carriers.

That there are such things as peak years cannot be questioned, but the fallacy of such a conclusion as just

stated can be readily demonstrated. Mr. Wettling and others frankly conceded the changes in the rules, but claimed they would have no substantial effect on results.

Let us assume that the change in the rule as to charging additions and betterments to surplus had been made in 1900 in place of June 30, 1907: what would be the effect? Our computation from Powell Exhibit No. 2 discloses that the rate would have been in 1906, 7.98%, as compared with the return under the rules existing at that time of 9.11%. This is simply a difference in methods of accounting. Further, we find that the return in 1900 would have been 8.42%. In other words, the decline which these carriers have been discussing would have commenced in 1900 instead of 1907.

Had the Commission simply adopted this different policy, had the Commission used a different set of accounts and rules of bookkeeping, the railroads in 1910 could have stated mournfully that their earnings had been declining since 1900; that the tide had changed in 1900.

The North Western Railroad could have ~~said that to this Commission~~ claimed a growing poverty, under that system of bookkeeping, notwithstanding the fact that the average rate of dividends prior to 1900 never reached 6½%; whereas since 1907 they have paid 7% every year. They could have told you their tale of poverty about things going to the dogs ever since 1900; they could have proved it to you by these figures, in spite of the fact that their accumulated surplus in 1900 only amounted to $6,900,000; and in 1910, it was $32,000,000. If the rules had been changed in 1902, the year 1900 would still have been the peak year; if they had been changed in 1903, the year 1900 would still have been the peak year. If the change had occurred in 1904, 1900 would still have been the peak year.

Must we conclude that 1900 would have remained the best year, regardless of any other changes in the items of the accounts or in the policy of the carrier?

Here again we find danger in accepting surface figures. If in 1900 the Chicago & North Western Ry. Co. had decided to enter upon the policy of raising the standard of their freight car equipment, leaving all other parts of their operating expense upon the same basis, if they had expended as much per freight car in 1900 as they did in 1906 or in 1914, leaving all other items precisely the same, their maintenance allowance would have increased, and their net operating income would have been decreased by over $2,300,000, making the per cent upon the property investment drop to 7.4%, instead of 8.63%. In that case 1900 would have been exceeded by 1901, 1902, 1903, 1905 and 1906.

These facts simply demonstrated that the changes in the accounting policy of the carriers, to which we have referred, are substantial in character, and must be reckoned with, in any attempt to consider tendencies.

Summarizing Mr. Chambers' analysis of the maintenance on the North Western, he finds during the years 1913 and 1914, that real maintenance, exclusive of any betterments or improvements, allowing for the increased cost of supplies and labor and allowing for the increased capacity of the car, would have been per freight car mile in 1913 8.38 mills; per passenger car mile, 8.51 mills; per locomotive mile, 6.7 cents, and for 1914 would have been per freight car mile 7.92 mills, per passenger car mile 8.20 mills, and per locomotive mile 6.42 cents. Applying these to the maintenance of equipment figures of those years, we find the excess maintenance amounting to $2,069,860 in 1913, and $2,954,165 in 1914.

Applying the basis used in Chambers' Exhibit 4, page 2, for maintenance of way and structures and adding adjustment for ties and rails for those years, we find the excess maintenance amounting to $602,352 in 1913, and $1,022,567 in 1914, making a total excess in maintenance (that part of those expenditures devoted to improving the

property), amounting to $2,672,212 in 1913 and $3,976,732 in 1914. Crediting net operating income with those sums, we find the net operating income for 1913 to be $23,039,612 and 1914, $23,089,381.

Further deducting from book value, allowances for betterments and improvements built out of surplus earnings since 1906 amounting to $27,020,656 accumulated to 1913 and $28,427,184 accumulated to 1914; the percentage of return on book value in 1913 is 7.75 and in 1914, 7.10—and no allowance has been made for new construction. The allowances for improvements charged to operating expenses which Mr. Chambers located, constituted only a small portion of the total charges of that character, for the reasons fully stated by him.

In 1914, the North Western Railroad issued $8,000,000 General Mortgage Gold maturing in 1987, the net proceeds above all commissions, discounts and expenses being $7,409,000. The yield on this issue was 4.4%. It will be noted that that yield is less than for any manufacturing, public utility or other industrial security issued by any New York or Massachusetts corporations, recorded in the offices of the public commissions of those states.

The same year the North Western issued Equipment Trust Certificates bearing a yield of 5½% this security being due in 1923. No manufacturing, industrial or public utility security were we able to find, of a like character, sold during the same period, at as low a rate.

CHICAGO, BURLINGTON & QUINCY.

Assuming that the Northwestern territory directly involved includes Illinois, Wisconsin, Minnesota, Iowa, North Dakota, South Dakota and Nebraska, the Burlington is very representative. 72% of its mileage is located in those states. The Burlington was selected by this Commission in the 1910 case together with the Santa Fe as representative of the territory. The Burlington was

named by Mr. Boyd and Mr. Wettling as a typical road in this territory. This road in 1913 earned a larger percentage of net operating income to property investment than in any year in its history, so far as our record goes.

The Burlington Railroad in 1913 earned a larger percentage on capital stock than any other year in its history. It earned the largest percentage on total capital obligations outstanding, of any year in its history. The 1913 dividends of the Burlington were 8%, the largest in its history. The accumulated surplus of the Burlington in 1913 amounted to $91,000,000, being the largest in its history excepting 1914.

A factor that makes the Chicago, Burlington & Quincy a very good index of earnings under present rates in this territory, is that the property investment has had a gradual growth during its entire period since 1890, the increase for no year being as much as 10%, with only two exceptions, those years being 1899 and 1901; both of which years showed a slight falling off in ratio of net operating income to property investment. The dividend history of the Chicago, Burlington & Quincy is given in the following tables:

CHICAGO, BURLINGTON & QUINCY.

Year	Rate of dividend common	Rate of interest
1890	4.50	5.20
1891	4.50	5.03
1892	4.75	5.15
1893	3.75	5.21
1894	5.00	5.25
1895	5.25	5.17
1896	4.00	5.16
1897	4.00	5.22
1898	5.50	5.23
1899	6.00	5.15
1900	6.00	4.96
1901	6.00	5.06
1902	7.00	4.76
1903	7.00	4.77
1904	7.00	4.03
1905	7.00	4.33
1906	7.00	4.22
1907	8.00	4.33
1908	8.00	3.90
1909	8.00	3.90
1910	8.00	4.32
1911	8.00	4.05
1912	8.00	4.29
1913	8.00	4.33
1914	8.00	4.18

The annual cash return to the investor in Burlington stocks certainly is no ground for demanding increased freight rates as evidenced by the accompanying table. Paying a dividend in 1890 of 4½% with a dividend in 1914 of 8%; paying interest on debt in 1890 amounting to 5.20% and an average interest in 1914 amounting to 4.18%, there is little ground for complaint, dividends going up and interest coming down. Last year the Burlington earned net 16% on its capital stock outstanding in the hands of the public.

The accompanying table shows the tendencies in the net revenues of the Burlington. It will be noted that the net operating revenue in 1913, amounting to $31,500,000, is over 100% greater than in 1900; 200% greater than in 1890. It surpasses any previous year in its history. In 1914 the net operating revenue amounted to $30,000,000 and was greater than any other year, except 1913.

CHICAGO, BURLINGTON & QUINCY.

Year	Single track mileage operated	Operating revenue	Operating expenses	Net Operating revenue	Total Maintenance
1890 ...	5,138.82	$28,016,246	$17,304,648	$10,711,598	$ 6,553,611
1891 ...	5,284.27	25,584,120	16,288,833	9,295,287	5,656,794
1892 ...	5,440.74	30,949,795	19,633,653	11,316,142	8,028,025
1893 ...	5,556.21	33,328,147	21,545,502	11,782,645	8,479,377
1894 ...	5,595.58	27,240,889	16,863,331	10,377,558	6,377,344
1895 ...	5,731.82	23,392,993	14,541,485	8,851,505	5,051,079
1896 ...	5,870.48	25,372,965	15,798,860	9,574,105	6,402,314
1897 ...	5,859.70	26,379,964	15,495,833	10,884,131	5,838,700
1898 ...	5,859.70	32,294,782	19,352,514	12,942,268	9,004,801
1899 ...	6,230.93	32,799,049	19,317,492	13,481,557	8,420,727
1900 ...	6,412.48	37,643,138	23,119,092	14,524,046	10,939,912
1901 ...	7,789.46	48,943,253	31,269,527	17,673,726	14,572,018
1902 ...	7,971.13	52,290,131	32,365,094	19,925,037	14,892,009
1903 ...	8,306.75	60,576,508	36,063,619	24,512,889	16,541,682
1904 ...	8,326.16	62,846,447	39,442,050	23,404,397	18,025,741
1905 ...	8,561.64	64,049,402	39,496,209	24,553,193	18,541,341
1906 ...	8,677.02	72,073,772	48,321,472	23,752,300	24,573,701
1907 ...	8,875.07	80,127,986	55,847,189	24,280,797	28,861,322
1908 ...	9,023.65	77,763,356	55,162,492	22,600,864	26,423,338
1909 ...	9,020.82	78,612,629	54,560,998	24,051,631	26,353,188
1910 ...	9,039.97	87,869,517	63,010,965	24,858,552	30,782,627
1911 ...	9,074.84	88,272,208	59,541,926	28,730,282	27,167,416
1912 ...	9,074.10	86,723,068	60,646,949	26,076,119	27,835,063
1913 ...	9,128.51	94,374,486	62,842,891	31,531,595	28,669,078
1914 ...	9,263.86	92,750,934	62,148,398	30,602,536	27,891,314

CHICAGO, BURLINGTON & QUINCY.

Year	Freight revenue including switching	Revenue ton miles per mile of road	Revenue tons per train mile
1890	$19,849,577	$388,819	$152.22
1891	16,821,990	311,442	129.50
1892	21,838,770	399,395	150.19
1893	22,882,126	429,206	155.00
1894	17,202,394	334,573	155.00
1895	15,116,642	291,779	150.00
1896	16,788,199	326,037	166.00
1897	18,658,355	336,628	163.84
1898	23,885,959	408,369	163.53
1899	23,094,178	401,570	180.01
1900	26,791,149	469,773	195.26
1901	33,680,811	496,997	200.43
1902	35,778,377	498,082	220.52
1903	42,520,433	586,702	271.24
1904	44,127,631	612,710	284.14
1905	43,708,570	606,070	322.27
1906	51,027,011	726,503	370.38
1907	56,222,393	801,666	394.06
1908	53,552,040	731,925	384.26
1909	53,205,659	733,930	387.44
1910	59,281,549	822,474	381.26
1911	59,123,311	784,149	406.33
1912	58,960,770	845,922	437.75
1913	65,390,931	963,074	483.83
1914	64,100,830	929,702	478.57

A very striking example of the reconstruction that has been going on, and the economies that have effected a revolution in railroading among representative companies during recent years is given in the following extract from one of the annual reports of the Burlington to its stockholders:

> "The Company has, in the past years, expended very large sums in the reduction of grade and curvature, for more and longer side and passing tracks, heavier locomotives and larger equipment, whereby the train load has been very greatly increased. This is to be seen from the fact that in 1901 the freight train miles (including mixed) were 19,314,987, as against 17,554,338 in 1912, or a decrease of 9.1%. During the same period the ton miles increased from 3,871,337,916 to 7,675,979,757, or an increase of 98.3%. *In other words, in 1912, fully twice the volume of freight business was handled, with nearly 10% less of freight train miles run to move it.*" (Annual Report to Stockholders of the Chicago, Burlington & Quincy, 1912. Powell Exhibit 1.)

The bonds of this company in 1914, as shown on page 5 of Norton Exhibit Volume 1, were sold on the market at a yield of less than 4½%, being less than the yield in 1890 in every instance save one; in that case it was the same. There has been an increase in the yield on the bonds of the Burlington since 1900, the average being 16.2% as compared to the average increase in government bonds of England, France, Germany and United States of 17.67%, and as compared to the increase in the bonds of the twenty largest cities in the United States, of 31%, compared to Norton pure money rate of 25%. The increase in the yield which represents the decline in the price of the bond has been greater than the average on the Northwestern group of railroads. The actual yield last year on outstanding issues has been 4.3% which is 1-10 of 1% less than the average for the Northwestern group of railroads. New issues on the Burlington in 1914

aggregated $6,000,000 par, net proceeds being $5,500,000 at a price of 91.7, making a yield of 4.4%. This sale was of the general mortgage bond due in 1958. That yield was the same as new issues of the Chicago & Northwestern Railroad Company; Chicago, St. Paul, Minneapolis & Omaha; slightly greater than the refunding bonds of the Great Western which, of course, has a very small percentage of bonds outstanding; slightly less than the Minneapolis, St. Paul & Ste. Sault Marie. This yield of 4.4% was less than any one of the 25 issues of public utilities and industrials in New York and Massachusetts or the United States Steel Trust, tabulated on sheets number 23 and 24 Norton Exhibit Volume 2, and that yield was less than any of the public utility bonds of New York State, approved by the Commission of the first or second district, or by the Massachusetts Commission, during the same year as shown on pages 35 and 36 of said exhibit, there being 129 of these issues gathered together, comprising all the issues of all kinds of public utilities companies, water, electric light, street railway, gas, telephone, telegraph, light, power, etc., which these three commissions in the states of New York and Massachusetts have passed upon last year.

The Burlington road has a credit of the very highest in the United States. The Burlington maintenance expenditures have averaged per locomotive since 1910 over $3,000 per engine, surpassing any prior period in its history. Likewise its maintenance per freight car during the same period has been greater than any other period in its history. Its maintenance per mile of line has also been greater.

ATCHISON, TOPEKA & SANTA FE.

The accompanying table shows the tendency of operating revenues on the Santa Fe Railroad. In 1913 we find a net operating revenue of $34,260,000, which was over

100% greater than in 1900, and 300% greater than in 1890. Net operating revenues in 1913 were greater than in any preceding year of its history, and greater in 1914 than any other year excepting the year 1913.

ATCHISON, TOPEKA & SANTA FE.

Year	Single track mileage operated	Operating revenues	Operating expenses	Net operating revenue	Total maintenance
1890 ...	4,582.19	$20,839,294	$12,808,473	$ 8,030,821	$ 4,681,633
1891 ...	4,582.12	23,473,121	15,401,641	8,071,480	5,538,326
1892 ...	4,582.12	25,552,184	16,113,776	9,438,408	6,103,875
1893 ...	4,582.12	27,514,653	17,313,671	10,200,982	6,439,184
1894 ...	4,582.12	21,953,602	15,581,692	6,371,910	5,806,950
1895 ...	4,582.12	19,787,623	15,096,210	4,691,413	5,960,360
1896 ...	4,528.16	20,806,435	14,878,646	5,927,789	6,508,082
1897 ...	4,542.76	22,153,519	15,431,905	6,721,614	7,312,751
1898 ...	4,564.73	25,451,917	16,481,118	8,970,799	7,741,047
1899 ...	4,687.81	26,543,068	16,293,082	10,249,986	7,308,094
1900 ...	4,806.00	30,650,463	17,000,221	13,650,242	7,613,183
1901 ...	4,817.54	34,966,188	18,023,443	16,942,745	7,651,186
1902 ...	4,843.61	37,120,290	19,341,274	17,779,016	8,239,461
1903 ...	4,871.34	38,030,096	22,067,497	15,962,599	10,256,684
1904 ...	5,030.74	41,337,563	24,599,055	16,738,508	11,235,345
1905 ...	5,043.30	41,048,754	26,515,256	14,533,498	13,182,485
1906 ...	5,043.30	47,249,956	29,072,761	18,177,195	14,002,612
1907 ...	6,928.30	75,792,605	45,749,246	30,043,359	21,987,351
1908 ...	7,101.62	75,574,382	47,974,888	27,599,494	22,864,748
1909 ...	7,458.47	76,770,668	45,381,887	31,388,781	21,497,508
1910 ...	7,459.85	86,971,313	55,945,465	31,025,848	26,952,299
1911 ...	7,549.69	89,164,317	56,637,494	32,526,823	26,716,252
1912 ...	8,200.86	89,856,347	57,666,316	32,190,031	26,978,994
1913 ...	8,237.55	98,090,754	63,830,683	34,260,071	31,557,139
1914 ...	8,339.72	93,540,268	60,172,701	33,367,567	28,830,821

We find the man who has put his money into the Santa Fe Company has been faring better in recent years than formerly. Coming out of the receivership but recently the dividend rate in 1901 was 3½%. There has been a steady increase since then until the last five years when it has been 6% annually on the common stock, and 5% annually on the preferred stock. The interest rate has shown a slight increase on the Santa Fe, 1914 being

4.03%. They have not missed their interest, or passed a dividend, in the last fifteen years' time.

ATCHISON, TOPEKA & SANTA FE.

Year	Rate of dividend, common	Rate of dividend, preferred	Rate of interest
1890	....	....	3.31
1891	....	....	3.38
1892	....	....	3.60
1893	....	....	3.60
1894	....	....	3.64
1895	....	....	3.88
1896	....	....	2.26
1897	....	....	2.70
1898	....	....	2.89
1899	....	2.25	2.85
1900	....	4.00	2.85
1901	3.50	5.00	3.99
1902	4.00	5.00	3.74
1903	4.00	5.00	3.98
1904	4.00	5.00	3.98
1905	4.00	5.00	3.94
1906	4.50	5.00	3.89
1907	6.00	5.00	4.12
1908	5.00	5.00	3.96
1909	5.50	5.00	4.34
1910	6.00	5.00	3.94
1911	6.00	5.00	3.84
1912	6.00	5.00	3.97
1913	6.00	5.00	4.24
1914	6.00	5.00	4.03

Two facts of striking importance stand out in an analysis of this property. At the time of the reorganization $102,000,000 fictitious capitalization was issued, as testified to by Mr. Powell.

At the same time the book value or property investment was also exaggerated by the same amount of money.

The second fact of great importance is the enormous maintenance charges of recent years. The Santa Fe expended last year in maintaining its locomotives $4,189

per engine. For the same purpose the Burlington expended \$3,243; the Great Northern \$3,175; the North Western \$2,640. The Santa Fe expended in maintaining its passenger cars during the same year \$1,144; \$100 greater per car than the Burlington and twice as great as the North Western. The Santa Fe expended in 1914 in maintaining its freight cars \$101 each, or 20% more per car than was expended by the North Western, and that was the highest in the whole history of the North Western, with only one exception, 1907.

If the Santa Fe has figured maintenance in 1913 upon the same basis as the North Western did for the same year, the net income of the Santa Fe would have been \$5,000,000 greater than it was, or approximately \$35,700,000. But there was \$102,000,000 of property investment or book value created out of nothing at the time of the reorganization. Deducting that amount from the book value of the property for the year 1913, we have left \$516,000,000; but this sum includes \$32,300,000 that has been expended for additions and betterments charged to surplus, aside from other sums that undoubtedly exist, which we did not have time to find. This company, like all others, has been building for the future. During recent years its book value has increased at enormous strides, over \$100,000,000 being added since 1907. Making the same allowance for that factor which Mr. Commissioner Harlan did in the Southwestern case of 1910, we deduct 20%, we find a return for the Santa Fe on its property investment in 1913 amounting to over 9% instead of 4.98% as indicated by its books.

The Chicago, Minneapolis & Omaha is not an independent company. It is a part of the North Western system, and any financial analysis of this company by itself is subject to the criticism that you must consider system figures.

Their common ownership and management is evidenced by these facts.

The following officials, as shown by their official reports on file with the Commission, have the same position in each company:

Wm. A. Gardner, president; Sah'l. A. Lynde, vice-president and assistant secretary; Edward M. Hyzar, vice-president and general counsel; W. H. Stennett, auditor expenditures; L. S. Carroll, general purchasing agent; L. A. Robinson, comptroller; E. E. Betts, superintendent transportation.

The executive committee of the C., St. P., M. & O. has seven members and five of the seven are C. & N. W. officials. The C., St. P., M. & O. has thirteen directors, and nine of the thirteen are C. & N. W. officials.

In *Commercial Club of Superior v. G. N. Ry. Co.,* 24 I. C. C., at page 120, this Commission held that the C. & N. W. and the C., St. P., M. & O. should be considered one system, for the purpose of computing distances.

President Felton of the Great Western is the only executive official of any of the Northwestern group of railroads who took the stand. The Great Western is one of the weak sisters in this territory. It is so weak in character and so unrepresentative that the president himself admitted that it was not typical, on cross examination.

The Great Western is so unrepresentative in character that it is difficult to discover a mention of it in the Western Advance Rate Case of 1910. The Great Western was earning less than 2% on its property in 1910. Nevertheless the Commission denied an advance in this territory. There are people who earn less than 2% in the grocery business, hardware business and in all kinds of manufacturing and industrial pursuits, from one end of the country to the other. There are people who earn less than

2% in the oil business; yet most of us are willing to concede that the oil industry as a whole is profitable. Certainly, this Commission will never set up the Great Western as a standard to test the adequacy of the rates in this territory. The Great Western is better today, physically and financially, than it was in 1909 or 1910. The president of the road frankly conceded this, as stated elsewhere in the brief. It will be noted that it has been able to maintain its property since 1909 on a higher basis than ever before; maintenance per mile of line being greater; maintenance per engine being fully 50% greater than for any preceding period of like duration; maintenance per freight car being much higher than for any preceding period. In earlier years there were times when it earned slightly more on property than the last two years. For instance, in 1906 it earned 2½%, but turning over to the maintenance column it will be noted that this maintenance last year was 72% greater per locomotive, and the maintenance per freight car was over 100% greater, as well as the maintenance per passenger coach.

This company has not only been able to maintain its property during recent years at a standard equal to other representative carriers in the territory; but it has been able also to borrow money at as favorable a rate as any other railroad in this territory. The Great Western Railroad is chiefly a main line proposition joining the terminals of Omaha, St. Paul and Chicago, that were already served with a veritable network of main lines and feeders belonging to other companies. Any time table of this railroad will show that situation.

It is an axiom in modern railroading that a ~~territory~~ company must ~~contain~~ have both main line connections with great terminals, and a system of feeders, in order to successfully meet the competition of other railroad systems in the territory. There is hardly one railroad in the United States

that is successful, which is a main line proposition, without a large per cent of feeders, or unless it is a part of a system connecting terminals, which also has a large per cent of feeders. There may be a few exceptions here and there, to the foregoing rule which we have stated, but they are very rare, and because of peculiar circumstances.

The Great Western has wholly failed to meet these requirements.

Concerning his property, the president of the Great Western testified:

> "Mr. Thorne: Mr. Felton, I understand you to take the position that it was not fair to consider the weak line or the strong line, but the average line or typical line, in order to determine the adequacy of railroad revenues, is that correct?
>
> "Mr. Felton: Yes, sir.
>
> "Mr. Thorne: Would you consider the Great Western a typical line or average line in this territory?
>
> "Mr. Felton: No, sir, I would not say the Great Western was an average line. The Great Western is below the average in its returns.
>
> "Mr. Thorne: The Great Western was a party to the proceeding in 1910, was it not, to secure an advance in rates?
>
> "Mr. Felton: Yes, sir.
>
> "Mr. Thorne: And the Commission held the revenues at that time were adequate?
>
> "Mr. Felton: As far as the roads as a whole were concerned.
>
> "Mr. Thorne: Well, do you consider that a proper basis upon which to reach a conclusion?
>
> "Mr. Felton: I think that is the basis on which the Commission have always acted, I believe." (tr. 194-195.)

The Chicago, Milwaukee & St. Paul Railway Company has had an unfortunate history, with which the Commission is quite familiar. They have repeatedly violated the

rules of the Commission in the keeping of their account. The Commission has already had occasion to discuss some examples of that character.

During the past seven-year period, upon which Mr. Wright and his associates are laying so much stress, we find the property investment of the Milwaukee has increased enormously. The property investment has increased 100% since the 1910 decision. As to the character and wisdom of that investment, the operating and financial results of this carrier speak for themselves. As to whether the public shall be compelled to stand the loss, or whether the owners of the property shall pay that loss, is an important question which can only be decided one way if it is decided right, and in harmony with former decisions of this Commission and the courts.

During this period when the Puget Sound has been largely constructed and improved, the operating accounts have been intermingled as well as the revenue accounts, in the same manner that always becomes possible in connection with parent and subsidiary companies, or companies having intercorporate relations.

This company has included in its property investment, improvements and betterments built out of operating expenses and surplus earnings for many years. The 1906 report of this company to its stockholders, shows on page 24 the following entry:

Earnings and other income expended for
additions and improvements to property $25,617,015.81;

Over $7,000,000 of that sum being expended out of accumulated surplus earnings which they had on hand that year, 1906.

Last year this company had an accumulated surplus of over $43,000,000. It should have been over $50,000,000, and greater than any other year in the history of the company, if their accounts had been correctly kept during

recent years. We call your particular attention to the annual report to the stockholders for the year 1911. On page 17 you will find the following entry:

Discount, Commission and expenses
$25,000,000 debenture bonds of 1909
and 15-year European loan of 1910 $7,768,201.33

In the annual report to stockholders for the year 1913, on page 25 we find the following entry:

Discount on General Mortgage 4½%
bonds and Extension Milwaukee &
Northern Railroad Co. 4½% bonds $1,393,704.65

(It will be noted on the same page there is a debit charge to profit and loss by reason of the acquisition of the accounts of the Puget Sound Railway or $1,816,439.00.)

In the annual report to stockholders in 1914 you will find the following entry on page 25:

Discount on General Mortgage and

General and Refunding Mortagage bonds $898,646.00

(It will be noted on this same page there is an Adjustment by reason of the acquisition of the accounts of the Puget Sound amounting to over a million dollars. In those three years, 1911, 1913, 1914, we find discounts aggregating over ten million dollars charged to profit and loss the year they occur instead of being spread over the life of the bonds.)

The custom of carriers of charging to renewals and depreciation, the cost of equipment retired and still keeping that equipment in service, is proved by the entry in the annual report to the stockholders, 1912, on page 33:

> "These locomotives and cars, dropped from inventory when their replacement was provided for by charges to Income Account prior to July 1st, 1907, are still in use, chiefly in train work and construction service. It is therefore necessary to reinstate them in the accounts and in the inventory of equipment. The difference between their original

> cost and their scrap value has been credited to "Reserve for Accrued Depreciation," and when they are destroyed or taken down no further charge to Operating Expenses or Income Account will be necessary."

On this page we see this company has put into property investment the total cost new of 60 locomotives and 2,751 cars without any deduction whatever for depreciation, although they had been written out of service over five years ago. (The details of this equipment and these facts are given on page 9 of the same report.)

Another fact of significance is that this company increases its reserve for accrued depreciation almost 100% in one year, this being shown on top of page 11 in 1912 report to stockholders, where it is stated, "At the close of the fiscal year ending June 30th, 1911, there was at the credit of Reserve for Accrued Depreciation the sum of $2,975,310.57." On the same page it is stated that the balance of this account June 30th, 1912, is $5,350,000.

Another fact worthy of note is that the operating revenues of this company in 1912 declined $1,800,000, but in spite of that fact, this company increased its maintenance by about $1,700,000. The maintenance in 1911 was the largest in the history of this company, both in gross and in per cent of gross revenues (so far as our record shows) with only one exception. That was for the year 1900. If this company had been content to maintain the same percentage of gross revenue for its maintenance accounts in the year 1912 as it did in 1911, which was ~~the~~ a peak year in the history of the company, being one of the two highest since the organization of the Interstate Commerce Commission, the net operating income of the Milwaukee for 1912 would have been $15,975,513.

If during the year 1912 this company had maintained the same average rate of maintenance to property investment as existed during the seven-year period used as the basis of Mr. Wettling's exhibit, from 1901 to 1907, its

maintenance for the year 1912 would have been $13,760,076.

Then if we take the property investment as of 1912, excluding betterments and improvements out of surplus earnings, we will have a rate that compares very favorably to preceding years. The betterments and improvements as stated above, built out of earnings and income up to 1906, amount to $25,617,000, which was formerly $5,000,000 less than the accumulated surplus brought forward for the year 1906.

In the year 1911 we have the unwarranted decrease in the accumulated surplus of over $7,000,000; because the discount on bonds which should have been spread over the life of the bonds; but taking the accumulated surplus brought forward as it is shown on the books for the year 1912, amounting to $49,000,000, and then subtracting the $5,000,000 excess which we have found to exist in 1906, it is probably fair to assume that the resulting figure, $44,000,000 represents the betterments and improvements that had been built out of surplus or earnings. Subtracting that from the property investment as of 1912, amounting to $294,000,000, we have a resulting property investment of $250,000,000. Divide that into operating income. Placing the maintenance on the 1911 basis or placing the maintenance in 1912 upon the average percentage of the property investment which existed in the seven-year period 1901 to 1907 inclusive, we find a rate of return on book value for 1912 which compares very favorably with those of preceding years, notwithstanding the fact that 1912 was a poor year on the Milwaukee, their operating revenues declining more than $2,000,000, compared with the preceding year. It is true the operating revenues are greater than in former years; but it is also true that book value we have adopted also exceeds that of former years, excluding all betterments and improvements out of surplus.

The Commission itself, in the 1910 case, made a somewhat extended analysis of the Milwaukee's operating statistics and of the unreliability of the same, reaching the following conclusion:

> "An examination of the exhibits furnished by the Milwaukee road satisfies us that we must arrive at either one of two conclusions: (1) That the road is not as efficiently managed as others—a view which we decline to accept; or (2) that its tables do fully reveal their own significance." *(Western Advance Rate Case 1910,* 20 I. C. C., 307-367.)

Again the Commission had occasion to criticise the operating reports of this company in a recent investigation. In view of the remarkable discrepancies both in operating reports and operating policy, and in view of the bad judgment evidently displayed in the purchase of the Puget Sound, we feel justified in adopting either one or two alternatives stated by this Commission in its 1910 decision as to this company, and claim that it cannot be adopted as representative or typical.

While the property investment figures and the operating statistics have been subject to the foregoing variable conditions, we find a separation of the actual stocks and bonds outstanding in the hands of the public and the return thereon separated from the computations of returns received from the Puget Sound, as well as the securities issued for the purchase and the construction of the said Puget Sound, leaves a very handsome condition for the Milwaukee in recent years. It has been able to meet its operating expenses, pay its taxes, interest on bonds and debt and have a net corporate income which is very large and substantial and fully complies with the test this Commission laid down in its Advance Rate Case of 1910.

As to the Minneapolis & St. Louis and Iowa Central lines, we find nothing whatever in this record to justify

a different finding than the one stated by this Commission in its decision in the Western Advance Rate Case of 1910, 20 I. C. C., 307, 377.

Of the traffic handled by the Northwestern group of railroads, 86% is handled by the Burlington, Milwaukee, North Western, Great Northern, Northern Pacific and Union Pacific. If you exclude the last three railroad just named from the Northwestern group, in that case, the three railroads—the Burlington, Milwaukee and North Western—handled 78% of the traffic handled by the Northwestern group of railroads.

INVESTORS IN WESTERN RAILWAY SECURITIES, AS A WHOLE, HAVE BEEN EARNING ADEQUATE RETURNS.

(Prouty Test.)

The relation between net corporate income and capital stock practically dictates the credit of a company. It is well for the Commission to consider these factors. That relation has more effect than any other item in the accounting records, to determine the attractiveness of railway securities.

The main proposition, in so far as railway credit is concerned, is to make the securities attractive to investors. For these reasons we believe serious consideration should be given to these factors. We will do so, and we will consider each of the other methods that have been used by the Commission to consider the adequacy of rates.

The public is entitled to demand of our railroad companies that they shall meet the reasonable legitimate requirements of modern finance and operation; and upon their failure to so do, they are not entitled to the return received by those companies which do meet those requirements. What is reasonable for one is not reasonable for the other. You are not dealing with an imaginary person who owns a whole railroad system; you are dealing in a practical, concrete way with people who have invested their funds in railroad stocks and railroad bonds, who are demanding more money from the public. This Commission today cannot dictate how a company shall be capitalized, any more than it can dictate how or where a railroad shall be constructed or operated, except that it shall be reasonably safe. But this Commission can determine whether a company is entitled to larger earnings

for its present services; and in determining that issue you can and should take into consideration how a company is capitalized, how it is located and constructed, and how it is operated. A company failing to meet the reasonable requirements of modern management in finance or operation, is not entitled to the same amount of return as a company which does meet those requirements, and the former company should not be accepted by this Commission as a standard to test the adequacy of rates.

In the Eastern Advance Rate Case of 1910 the Commission found that the Baltimore & Ohio was able to earn above fixed charges, including interest on debt, and dividends on preferred stock, 7½% on all its outstanding common stock, and this was held to be adequate. This percentage varies slightly with the proportion of common stock to the total capitalization. In view of that fact it should be noted that the percentage of common stock to total capitalization of the Balitmore & Ohio in 1910 amounted to approximately 27½%, using the figures given in the reports of the Commission.

The exact language of the Commission will be here produced:

> "We express, however, no opinion as to the relation between the value and the capitalization of this property. We accept for the purposes of this investigation that Capital account as we find it, and certainly the stockholders of the Baltimore & Ohio R. R. Company cannot claim upon this record that this property should be allowed to make earnings in excess of what would yield a fair return upon that basis.
>
> "It should be noted that the dividend upon the preferred stock, $59,000,000 is virtually a fixed charge and ought not properly to be accounted as part of the dividends paid. To every practical intent it is a portion of the underlying liability which must be taken care of before the common stock receives any return." (20 I. C. C., 288.)

> "If this Company is to preserve its financial integrity upon the basis of its present capitalization and maintain its credit, it is probable that it must be allowed to earn a sufficient amount to pay its interests, its preferred dividends, a dividend upon its common stock, and have remaining a substantial surplus. The credit of the Company cannot be maintained for year after year upon any other basis. We are of the opinion that the sum remaining after the payment of fixed charges, including as a fixed charge the dividend upon the preferred stock, should be equivalent to between 7 and 8% upon the common stock. It should have sufficient earnings so that it may pay a dividend of 5% upon its common stock and carry 2½% to surplus or pay 6% upon its common stock and carry 1½% to surplus. This is upon the assumption that the capitalization does not exceed its actual value." (Id. 288.)

In making practical application of the foregoing basis, we will not deduct other income from the net corporate income of the carriers; this is for the same reason as that expressed by Commisioner Prouty in the case just cited. When considering the Pennsylvania railroad, he stated:

> "But the Pennsylvania Railroad Company is not merely a Railroad Operator—it is a great stockholding corporation. It holds for example the entire stock of the Pennsylvania Company which controls the Pennsylvania Lines west of Pittsburgh, that stock now being $80,000,000. The total amount of its holdings of securities outside of those held in sinking and other funds, according to its report to this Commission for the year ending June 30, 1910, amounted to a par value of $352,933,730. Upon these various securities and from other sources it had, during the year 1910, an income of substantially $17,000,000. Presumably its capitalization must to a considerable extent have been created for the purpose of acquiring these stocks and bonds, and since no detail is furnished us showing to what extent the capitalization does represent the Railroad property and to what extent the other properties of this Company, it is fair to con-

> sider in this connection its income from all sources in considering its ability to pay dividends upon its stock." (Id. 292.)

The states primarily concerned in this proceeding are as follows: Minnesota, South Dakota, North Dakota, Wisconsin, Iowa, Nebraska, Kansas, Missouri, Arkansas, Louisiana, Oklahoma and Texas. As previously stated, the Supreme Court of the United States has frequently had occasion to consider the adequacy of revenues of all the roads in a given state, or of representative railroads in a given state.

Applying the Prouty process to the railroads serving the states named, we find that all the railroads in each of those states have had revenues sufficient to pay all their operating expenses, all their taxes, all their interest on bonds, dividends on preferred stock; and they have had enough left over to equal the percentages on all their common stock outstanding in the hands of the public as is indicated in the following tables. In these computations we have used all of the roads, the rich and the poor, without any selection, that touch the states in any manner, except roads having operating revenues amounting to less than $1,000,000, because they are not finally reported as yet by the Interstate Commerce Commission for the last two years, the only figures available being those given in the preliminary abstract of the Commission. However, this does not affect the validity of the showing as truly comprehensive, and representative of the territory involved; because the roads earning $1,000,000 or more handled over 98% of the traffic in the Western Classification Territory during the last year, this figure could be arrived at, that being the year 1912.

RETURN ON COMMON STOCK OF ALL RAILROADS OPERATING IN STATES NAMED.

States	1911	1912	1913	1914
South Dakota	8.93	8.31	11.52	8.86
Minnesota	8.81	7.97	10.53	8.28
North Dakota	7.95	8.14	10.48	8.66
Iowa	15.10	8.55	10.92	9.06
Wisconsin	8.76	8.49	11.14	9.31
Nebraska	18.30	8.34	10.91	8.97
Kansas	14.52	6.50	8.47	6.64
Missouri	4.94	4.11	6.59	4.66
Arkansas	3.49	2.07	3.16	0.94
Louisiana	3.46	3.05	3.81	1.74
Oklahoma	5.58	4.42	5.47	3.20
Texas	2.03	1.45	1.50	D 1.41

D—Indicates figures in red.

Authority: Statistical Reports of the Interstate Commerce Commission. Tables, page 20, Chambers Exhibit 1.

When Mr. Chambers was first on the stand, objection was made on cross-examination to this table on the ground that it included a road that only had 10 or 12 miles in a state, specific reference being made to North Dakota and the North Western Railway.

In order to eliminate every objection of that character, Mr. Chambers then compiled this table again, eliminating all railroads operating less than 100 miles in any of the states. This computation produced the following results, and it will be noticed that there is very little change in the situation as a whole:

RETURN ON COMMON STOCK OF ALL RAILROADS (OPERATING 100 MILES OR MORE OF ROAD IN EACH STATE NAMED) WHOSE ANNUAL OPERATING REVENUES EXCEED $1,000,000.

	1911	1912	1913	1914
South Dakota	9.31	8.55	12.15	10.05
Minnesota	8.19	7.58	9.91	7.63
North Dakota	7.84	8.31	10.57	8.78
Iowa	8.31	6.22	10.26	8.16
Wisconsin	8.90	8.00	11.21	9.68
Nebraska	18.30	8.34	10.91	8.97
Kansas	16.14	7.42	9.31	7.33
Missouri	5.54	4.76	7.26	5.23
Arkansas				
Louisiana	3.92	3.26	3.80	2.51
Oklahoma	5.54	4.36	5.47	3.20
Texas	1.51	0.84	0.77	D 2.56

D—Indicates deficit.

Authority: Statistical Reports of the Interstate Commerce Commission.

These facts were testified to on transcript, page 13585.

It will be noticed that all of the Northwestern group of states more than fulfill the requirements laid down by the Prouty test. This is not true of the Southwestern group of states, if you disregard that part of Mr. Commissioner Prouty's discussion where he states, "This is upon the assumption that the capitalization does not exceed its actual value." This record shows that assumption is not true as to the Southwestern group.

Further we have offered very substantial evidence that capitalization in the Northwestern group of states is excessive (and in those states the railroads more than fulfill their requirements, notwithstanding that fact). We did not have opportunity nor facilities to make an extended investigation and analysis of the Southwestern railroads, except as shown by our preliminary survey, given in Mr. Powell's Exhibit No. 2, which should be supplemented by a critical analysis of representative carriers in that territory.

NORTHWESTERN GROUP—RETURN ON CAPITAL AND COMMON STOCK.
FISCAL YEAR 1913.

Roads	Capital Stock in hands of public	Common Stock in hands of public	Net Corporate Income	Dividends on Preferred Stock paid	Dividends on Preferred which should be paid	Surplus Applicable to Common
Chicago & North Western	$ 152,512,149	$ 130,117,029	$ 14,875,013	$ 1,791,600		$ 13,083,413
Chicago, St. P., Minneapolis & Omaha	29,813,067	18,556,266	2,278,933	787,976		1,490,957
Chicago, Burlington & Quincy	110,839,100	110,839,100	20,086,196			20,086,196
Chicago Great Western	86,268,315	45,246,913	1,245,039		$1,640,856	D 395,817
Chicago, Milwaukee & St. Paul	231,877,900	115,946,000	19,833,841	8,115,233		11,718,608
Minneapolis & St. Louis	21,088,790	15,205,620	370,227		295,875	74,352
Great Northern	222,940,046	222,940,046	24,354,815			24,354,815
Northern Pacific	247,944,400	247,944,400	21,559,738			21,559,738
Union Pacific	316,177,400	216,633,900	35,209,011	3,981,740		31,227,271
Minneapolis, St. P. & S. S. Marie	37,810,200	25,206,800	5,507,041	882,238		4,624,803
Total	$1,457,271,367	$1,148,636,074	$145,319,854	$15,556,787	$1,936,731	$127,824,326
Per cent earned on capital stock			9.97			
Per cent earned on common stock						11.12
Totals—above	$1,457,271,367	$1,148,636,074	$145,319,854	$15,558,787	$1,936,731	$127,824,326
Chicago, Rock Island & Pacific	$ 74,872,322	$ 74,872,322	$ 3,997,029			$ 3,997,029
Illinois Central	119,276,900	109,287,200	6,575,113		$ 399,588	6,175,525
Total	$1,651,420,589	$1,332,795,596	$155,891,996	$15,558,787	$2,336,319	$137,996,890
Per cent earned on capital stock			9.44			
Per cent earned on common stock						10.35

Authority: I. C. C. Preliminary Abstract of Statistics of Common Carriers for the year ended June 30, 1913, covering roads having operating revenues exceeding $1,000,000.00.

D—Indicates figures in red.

P. 27, Chambers Exhibit, Vol. 1.

Kansas does not fairly belong in the Southwestern group. The showing in Kansas is embarrassed by the weak Southwestern lines that pass through the state, and reach down into Texas and the West, lines that may be earning more than adequate revenues but, because of excessive property investment and capitalization, make apparently a very low return.

Taking the ten railroad systems serving the states of Iowa, Minnesota, North Dakota, South Dakota and Nebraska, we find these railroads earned, above all operating expenses, above all taxes, and above all interest on bonds and debt, and dividends on preferred stock, enough net income, during the fiscal year 1913, to equal 11% on all their outstanding common stock in the hands of the public.

In 1914, during the year of depression, we find the same group of railroads earning 9.11% net, on all their common stock outstanding. If you include the Rock Island and Illinois Central, 8.48%.

In 1913 the Chicago & North Western earned 10% on its common stock; the Burlington earned over 18%; the Great Northern over 10%; the Northern Pacific over 8%; the Soo Line over 18%; the Union Pacific over 14%; and if you exclude capitalization issued because of the Puget Sound as well as income on the Puget Sound, the Milwaukee earned 12%. These seven railroads handled over 75% of the traffic hauled by the Northwestern group. In 1914 this same set of seven railroads earned over 10% on all their common stock as a whole.

When this exhibit was being introduced by Mr. Chambers, questions were asked why he adopted the principle of excluding roads having two-thirds or more of their mileage outside of the territory; in other words, why didn't he exclude those having only one-half of their mileage outside of the territory. Mr. Chambers stated his

reasons were simply that he wanted to be fair and reasonable in his method.

If a company had one-half of its mileage in the territory, it might have been claimed that that company at least should have been included in the list, as it was serving the territory in as large a measure as it served any other territory; therefore, it would be typical of that district. However, in order to meet the objection, Mr. Chambers later adopted the suggestion and reappeared on the stand giving the results of his computations.

If Mr. Chambers had included the roads having one-half of their mileage outside of the territory, in 1914, during the year of depression, the Northwestern group of railroads would have earned on their capital stock 8.46% (instead of 8.39%). Adopting the Prouty rule that dividends on preferred stock should be considered a fixed charge, this Northwestern group would have earned 9.41% on its common stock, (as compared with 9.11% as shown in Exhibit 1, excluding those having two-thirds of their mileage outside of the territory).

Dr. Lorenz asked the question, "What would have been the result if you had excluded only those roads that had one-third or more of their mileage outside of the territory?" In other words, you are only taking those roads having more than two thirds of their mileage in the territory involved. This, of course, would exclude the Atchison, Topeka & Santa Fe from any group of railroads in the case. It would also exclude the Great Northern and Northern Pacific from any group of railroads in the case. In other words, trans-continental roads would be a class unto themselves. No account of their earnings would be taken into the consideration of the adequacy of freight rates in any given territory. The tendency of the day is toward having trans-continental lines of railroads. Trans-continental lines do serve the territory that they pass through, to as great or greater extent than any railroads

in that territory. Their trans-continental traffic serves to reduce their cost, inasmuch as that traffic uses the same roadbed, etc., that is used on local traffic. Such a rule of exclusion we believe would be unjust to the territory. However, the inquiry is interesting; and, for that reason, Mr. Chambers recompiled his exhibit upon those lines, and gave the result of his computation. He also excluded the Union Pacific, although two-thirds of its mileage is in the territory, and if he had included it, it would have raised the percentage, slightly.

We now find that if he had included only those roads having two-thirds of their mileage inside of the territory, in 1914, during the year of depression, the Northwestern group of railroads would have earned on their common stock 8.12%.

The Southwestern group, as a whole, earned upon their common stock in 1913 3.78%; in 1914 they earned 2.03%.

If you consider the Western Trunk Line and Trans-Missouri Committee Territories, you have the territory embraced in the Commission's decision of 1910. In that group you include the states of Wisconsin, Minnesota, North Dakota, South Dakota, Iowa, Nebraska, Missouri, Kansas, and Colorado east of Denver. Using all the interstate railroads in the Commission's order serving that territory, excluding only those having at least two-thirds of their mileage outside of the territory, we secure a list of 17 railroads having 83,892 miles of road. The territory served by these railroads is over 350,000 square miles greater than both Official and Southern Classification Territory put together. This is the largest territory, both in miles of railroad and in square miles, in the United States.

In this description we include the territory served by the Western Trunk Line railroads as above described.

Applying the Prouty test to that group of railroads for the year 1913, we secure the figures showing on the accompanying table:

WESTERN TRUNK LINE GROUP—RETURN ON CAPITAL AND COMMON STOCK.
FISCAL YEAR 1913.

Roads	Capital Stock in hands of public	Common Stock in hands of public	Net Corporate Income	Dividends on Preferred paid	Dividends on Preferred that should be paid	Surplus Applicable to Common
Chicago & North Western	$ 152,512,149	$ 130,117,029	$ 14,875,013	$ 1,791,600		$ 13,083,413
Chicago, St. Paul, Mpls. & Omaha	29,813,067	18,556,266	2,278,933	787,976		1,490,957
Chicago, Burlington & Quincy	110,839,100	110,839,100	20,086,196			20,086,196
Chicago, Milwaukee & St. Paul	231,877,900	115,946,000	19,833,841	8,115,233		11,718,608
Great Northern	222,940,046	222,940,046	24,354,815			24,354,815
Northern Pacific	247,944,400	247,944,400	21,559,738			21,559,738
Minneapolis, St. Paul & S. S. Marie	37,810,200	37,810,200	5,507,041	882,238		4,624,803
Union Pacific Ry	316,177,400	216,633,900	35,209,011	3,981,740		31,227,271
St. Joseph & Grand Island	13,599,400	4,600,000	D 226,290		$ 414,970	D 641,260
Chicago, Great Western Ry	86,268,315	45,246,913	1,245,039		1,640,856	D 395,817
Minneapolis & St. Louis	21,088,790	15,205,620	370,227		295,875	74,352
Chicago, Rock Island & Pacific	74,872,323	74,872,323	3,997,029			3,997,029
St. Paul & Kansas City Short Line	50,000	50,000	D 317,588			D 317,588
Atchison, Topeka & Santa Fe	305,010,230	190,836,500	22,143,009	5,708,690		16,434,319
Missouri Pacific	82,702,585	82,702,585	369,697			369,697
Wisconsin & Michigan	1,500,000	1,500,000	5,625			5,625
Fairmount & Veblin						
St. Louis & San Francisco Ry	49,985,762	28,992,350	D 447,392		839,736	D 1,287,128
Total	$1,984,991,667	$1,544,793,232	$170,843,944	$21,267,477	$3,191,437	$146,385,030
Per cent earned on capital stock			8.61			
Per cent earned on common stock						9.48

Authority: I. C. C. Preliminary Abstract of Statistics of Common Carriers for the year ended June 30, 1913, covering roads having operating revenues exceeding $1,000,000.00, and the data for those earning less is taken from Poor's Manual.

D—Indicates figures in red.

In 1913 Western Trunk Lines earned upon their common stock 9.48%. These same railroads, during 1914, a year of depression, earned 7½% on all of their common stock outstanding in the hands of the public. In 1914, if you had included only those lines having one-half of their mileage in the territory, excluding those having over half of their mileage outside of the territory, the Western Trunk Lines earned 7.88%. If you had included only those roads having two-thirds of their mileage inside of the territory, the Western Trunk Lines would have earned 7.97%.

The Prouty basis is perhaps as fair a one as can be devised, with one all-important qualification and that is, that the capital does not exceed the value of the property; and, to the extent that the capital does exceed that value, this test becomes inapplicable, but that makes the test more than fair to the railroads. A justification for this basis that is almost conclusive is that, during ordinary seasons, in the case of a railroad which meets that requirement, you will find almost invariably that the bonds are selling at prices amongst the highest of any bonds of that denomination in the market; and, second, that these stocks are selling close to par, or above par. No better vindication of that basis can be asked, than the fact that it is suported by the sober judgment of the investing public, people who back up their judgment with their money.

It is common knowledge that last year was a period of depression and yet, if you take the average market prices of the stocks of all our Northwestern group of railroads, weight them in proportion with the common stock outstanding, as of June 30, 1914, it is found that the average market price for these stocks is 126.5. If you exclude from your list representing the Northwestern territory, the Great Northern, Northern Pacific and Union Pacific railroads, it makes very little difference in the result. In that case the average market price is 125.7.

NORTHWESTERN GROUP.

	Common Stock in hands of public June 30, 1914 a	Average Market Price June 30, 1914 b	Common Stock Multiplied by Average Market Price June 30, 1914
Chicago & North Western......	$ 130,117,029	131.3	$ 170,843,659
Chicago, St. Paul, Minn. & Omaha	18,556,267	128.8	23,900,472
Chicago, Burlington & Quincy...	110,839,100	c 210.	232,762,110
Chicago, Great Western........	45,246,913	12.4	5,610,617
Chicago, Milwaukee & St. Paul..	116,850,100	98.2	114,746,798
Minneapolis & St. Louis.........	15,205,620	13.1	1,991,936
Great Northern	238,668,929	123.9	295,710,803
Northern Pacific.................	247,944,400	110.1	272,986,784
Union Pacific	222,291,600	149.5	332,325,942
Minn., St. Paul & S. S. M........	25,206,800	122.7	30,928,744
Total—Northwestern Group.	$1,170,926,758		$1,481,807,865
Average market price, all roads, Northwestern Group			126.5
Total—Great Northern, Northern Pacific and Union Pacific	$ 708,904,929		$ 901,023,529
Total—Northwestern Group, excluding Great Northern, Northern Pacific and Union Pacific	$ 462,021,829		$ 580,784,336
Average market price, Northwestern Group, excluding Great Northern, Northern Pacific and Union Pacific			125.7

a—Taken from Chambers Exhibit, Vol. 1.
b—Taken from Norton Exhibit, Vol 3.
c—Bid price.

The investors on the market places of the country have given a complete vindication to our claims that this Northwestern group of railroads is in a prosperous condition.

WHEN CONSIDERING THE REASONABLENESS OF RATES, IF THE CHIEF ISSUE IS NOT ONE OF DISCRIMINATION, BUT CONCERNS THE AMOUNT OF REVENUE, THIS QUESTION IS AT THE BASIS OF ALL COMPUTATIONS: DO THE RATES YIELD A REASONABLE RETURN UPON THE PRESENT VALUE OF THE PROPERTY DEVOTED TO THE PUBLIC SERVICE?

SUPREME COURT BASIS.

The Supreme Court has very clearly established the doctrine described above. These decisions relate almost entirely to state and municipal schedules of rates, because this issue, presented in the pending investigation, is unusual in interstate commerce litigation.

The question of what is a reasonable rate of return is a question of fact for the Commission to determine. The methods of finding whether any given companies are earning a reasonable return is a question of law. Where rates are fixed on the basis of the rates charged elsewhere, under similar conditions, then the value of the property used is not material to the decision.

If a commission raises, or reduces, a schedule upon the basis of revenue, then the value of the property becomes the basis.

These issues have been passed upon by the courts, and are thoroughly established.

Our discussion at this time will relate to the following subjects:

1. Reasonable Rate of Return; and
2. The Present Fair Value of Railroads in This Proceeding.

WHAT IS A REASONABLE RATE OF RETURN?

A mistake of 1% by you gentlemen in your conclusions as to what constitutes a reasonable rate of return in this case, will be equivalent to a mistake of one billion dollars in the value of the railroads that are parties to this case. (See footnote.)

The analysis and investigation of what is a reasonable rate of return is almost as important as the making of the national appraisal of American railroads.

It is much easier for the human mind to deal with several hundred millions of dollars, than it is with ½ of 1%; and that simple truth justifies our request that you give most careful consideration to this problem. You are better fitted and better qualified to perform that task, by experience and training, than any other tribunal in this nation.

In the Brunswick Water case, several years ago, Mr. Leonard Metcalf, a civil engineer of standing, advanced the thought that a company is entitled to a so-called "profit increment," over and above the value determined by considerations of the cost of reproduction, original investment, and the other factors ordinarily named. Mr. Metcalf claimed this profit increment should range from 20 to 50%. In the Livermore Falls Water Works valuation, he placed this "profit increment" at 33 1-3%. The counsel in the case, more adroitly, perhaps, allowed for this same percentage; not on the value of the plant, as Mr. Metcalf insisted was the correct method, but by adding it to the ordinary money interest rate in that locality, so as to find "a reasonable rate of return."

FOOTNOTE—The total book value of the railroads named in the Commission's suspension order in this case is approximately $5,000,000,000. If 5% is, in fact, a reasonable return in this industry on the entire property of a railroad, an error of 1% is equal to a mistake of one-fifth of the whole; it has the same effect on the result as a mistake of one billion dollars in the valuation adopted.

While the final figures are identical, the effect on the mind of the two methods used is amazingly different. Mr. Metcalf, in the case referred to, added \$21,325 to the original cost amounting to \$65,475; while counsel in the case adopted \$1.25 as the "ratio of profit to capital cost," using $6\frac{7}{8}\%$ as a reasonable rate of return, assuming the cost of capital to be $5\frac{1}{2}\%$.

Variations of a fraction of 1% seem so insignificant that we are far more apt to overlook or accept them as approximately correct; while a concrete sum amounting to \$21,000 to be added to \$65,000 immediately challenges our attention and demands full investigation. Twenty-one thousand dollars (\$21,000) looks much larger to the ordinary man than $1\frac{1}{4}\%$.

Careful and exhaustive discussions in the opinions of our commissions and courts analyzing decimal fractions, will be somewhat of a departure from our legal literature of the past; and yet the commercial demands of modern business are actually forcing that very situation upon courts and commissions.

If we have not been accustomed to negotiations for the purchase and sale of properties aggregating ten and fifty million dollars in value, it is impossible for us to form a rational and just idea of what is a reasonable rate on such investments.

We must consult those who are making this class of investments.

There are two places to go for knowledge as to what is a reasonable rate; one is to go directly to the financiers who have marketed large blocks of such securities during recent years; the other is to examine the records of actual prices paid and returns earned upon investments in some well established railway companies.

It is probable that this Commission could adopt any rate of return, varying from 2% to 10%, as reasonable;

then both the shippers and the railroads would be helpless, and entirely unable to reverse your decision. What is the use of finding by elaborate investigation whether the return is 4, 5, 6, or 7%, unless you also make an intelligent investigation of what is a reasonable return? Are you going to guess off this latter issue, at random?

Each one of us, probably, has a different standard of what is a reasonable rate on investments. There is a standard of more practical value than the opinion of innumerable shippers, or of railroad presidents, who might be placed upon the witness stand. Once more the investor, himself, becomes our witness, and his testimony is again recorded in the reports from the market places.

In dealing with this issue it is necessary for a person to disabuse his mind of any personal or preconceived notions that are not the result of actual contact with investments of the character under consideration, either by personal experience or by investigation of the experience of others. What constitutes a reasonable rate of return varies with the hazard and character of any business. A man owning a government bond is "an American citizen," and he is giving his money to the government to use for public purposes. Has he the right to a return of 7 or 8%? He cannot get it. Even if the government paid that rate of interest, they would be in such demand that you couldn't purchase a bond for less than two or three times their par value.

The value of the railroad property estimated in the United States census of 1910 was $15,000,000,000. The value of the farm property according to the United State census of 1910, was $40,991,000,000. (Wallace, tr. 4329.)

It is true some farms earn 8 and 10%, possibly higher in some portions; on the other hand there are hundreds of millions of dollars invested in farm land earning 3%

on their present value, aside from a meager labor wage to the owner.

Billions of dollars all over the nation seek investment at from 2½ to 5%. In 1913 the outstanding public debt represented by public bonds was almost $3,000,000,000. Of this, the prevailing rate was about 2¾%.

According to the National Monetary Commission, there were in 1909, $5,174,000,000 in the savings banks of the United States; and the average rate of interest paid to the investors was 3.55%. Last year there were approximately ten billion dollars in railroad bonds outstanding in the hands of the public, on which the average rate of interest was close to 4%.

The true basis of computation of the average rate of return is not the return paid on the par value of a security, but the yield on the amount actually invested. The stock might be paying 10% on its par value; if the price on the market is 200, the return to the investor is only 5%.

The following table shows the yields investors are receiving on their money placed in government bonds. Some of these securities carry with them privileges in addition to the actual money return, which reduces the yield:

ACTUAL RATES OF INTEREST YIELDED BY INVESTMENTS IN BONDS OF THE AMERICAN, BRITISH, FRENCH AND GERMAN GOVERNMENTS.

	U. S. 4's of 1907 and 1925	English Consols 2¾ and 2½ %	French Rentes 3%	German 3's
1890	2.37	2.86	3.32	3.45
1891	2.58	2.88	3.19	3.52
1892	2.73	2.85	3.09	3.48
1893	2.96	2.81	3.10	3.48
1894	2.72	2.73	3.01	3.31
1895	2.91	2.60	2.95	3.03
1896	3.14	2.49	2.95	3.02
1897	2.73	2.45	2.91	3.07
1898	2.69	2.49	2.93	3.14
1899	2.47	2.57	2.97	3.31
1900	2.18	2.77	2.99	3.46
1901	1.97	2.93	2.98	3.36
1902	1.98	2.92	2.99	3.25
1903	1.99	~~2.82~~ 76	3.07	3.28
1904	2.09	2.84	3.09	3.33
1905	2.00	2.79	3.04	3.33
1906	2.04	2.84	3.08	3.42
1907	2.18	2.98	3.18	3.57
1908	2.44	2.91	3.13	3.62
1909	2.52	2.98	3.09	3.54
1910	2.73	3.08	3.07	3.55
1911	2.68	3.17	3.14	3.59
1912	2.67	3.26	3.24	3.74
1913	2.74	3.40	3.47	3.97
1914	2.73	3.33	3.51	3.90

(From Norton Exhibit 3, page 38.)

The following table shows actual money earned on investments in the bonds of four representative Western railroads, during the past 25 years:

ACTUAL RATES OF INTEREST YIELDED BY INVESTMENTS IN FOUR WESTERN RAILWAY BONDS BY YEARS, 1890-1914.

	M., K. & T. %	C., St. P., M. & O. %	C., B. & Q. %	C., M. & St. P. %
1890	5.20	4.96	4.53	4.39
1891	5.25	5.06	4.92	4.79
1892	5.04	4.84	4.73	4.49
1893	5.17	4.97	4.94	4.42
1894	5.04	4.63	4.72	4.46
1895	4.76	4.56	4.64	4.38
1896	4.92	4.65	4.80	4.28
1897	4.78	4.28	4.51	3.96
1898	4.57	4.12	4.07	3.83
1899	4.34	3.97	3.47	3.59
1900	4.40	4.09	3.42	3.61
1901	4.11	3.83	3.40	3.59
1902	4.05	3.81	3.50	3.51
1903	4.13	4.09	3.69	3.70
1904	4.06	4.03	3.72	3.68
1905	3.97	3.79	3.61	3.59
1906	4.03	3.97	3.78	3.71
1907	4.24	4.27	4.08	3.95
1908	4.15	4.18	4.04	3.93
1909	4.01	3.95	3.94	3.87
1910	4.07	4.13	4.09	4.01
1911	4.11	4.13	4.11	4.05
1912	4.22	4.25	4.19	4.09
1913	4.43	4.50	4.45	4.30
1914	4.61	4.47	4.29	4.26

(From Norton Exhibit 1, page 5.)

We cannot expect investors to place their money in railroad stocks and bonds at the same rate they make on government bonds, or at the same rate they make on deposits in the banks. These facts are stated merely to challenge attention to the situation that there are thousands of millions of dollars in this country seeking investment at around 4½% or less. One cannot deal fairly with these questions until that fact sinks into his consciousness.

You cannot expect people to invest in railroad stocks at the same rate they will invest in government bonds;

in the same way you cannot expect people to invest in local gas plants, or electric light plants, at the same rate they will invest in railroads. The reasonable rate of return varies from 2½ to 10% on ordinary investments. What is reasonable in one case is unreasonable in another case.

How shall we find the reasonable rate on the total value of a railroad property? No person buys or sells great railroad systems in bulk. We don't buy or sell them that way. We buy and sell them by piece meal in the shape of stocks and bonds. To imagine what would be a rate the investing public would consider reasonable, on a railroad property as a whole, requires a flight into the unknown, into the realm of speculations and dreams. In the practical world of today, we must reckon with facts as they are.

What is a reasonable rate of return on bonds of representative railroads is not a matter of mere speculation. That can be very definitely ascertained by investigating the records of the market place, where securities are bought and sold. That has been done in this case; and it has been conclusively shown that in the eyes of the investing public 4.5% is a reasonable rate of return on bonds of representative railroads. As to what constitutes a reasonable rate of return on railroad stocks, we can also secure information of a very definite and positive character. We might combine these.

A reasonable rate of return on stocks cannot be accepted by this Commission as a reasonable rate of return on total value of a property. If you owned the whole plant without any mortgage attached to it; if you had the whole plant supporting the stock, the rate, or yield, would be some amalgamation of the yield on bonds and stocks. It would be higher than the bond yield, and lower than the stock yield. Unfortunately we have to reckon with things as they are. We cannot get the judg-

ment of the investors of the nation as to the yield on a purchase and sale of a whole plant like the North Western railroad system, worth several hundred million dollars. People do not buy and sell properties like that, in that manner. They buy and sell them by piece meal, in stocks and bonds.

We cannot tell; nobody else can tell what the judgment of the investors of the country would be as to the reasonable rate of return on the Milwaukee railroad property as a whole. We can very readily find out the judgment of these men as to the reasonable rate of return on the bonds of this company, or on the stock of this company.

It is unsound to say that the securities of a railroad company, or any other kind of a company, have to pay annual returns equal to those prevailing in other industries, or equal to the prevailing interest rates in any given territory, in order that the said securities may be attractive to investors. Otherwise, we are told, people will put their money into those other enterprises. This is a very common fallacy, that has been widely circulated and accepted, sometimes by most eminent gentlemen; but it is a fallacy, nevertheless.

What is reasonable in one industry for one security is unreasonable for another. Farms do not earn what other industries earn in the same locality; and they do not earn an amount equal to the prevailing interest rates in that section. And yet farms are attractive to some investors.

Government bonds do not have to pay a return equivalent to the prevailing interest rates in the country, or equal to what investments in various industries earn, in order to be attractive to investors. If this government in a handsome, public spirited manner, should resolve, like this Commission is asked to decide as to railroads, that American citizens who loaned this government their hard earned cash, in order to carry on the public work

of our National Government, are entitled to receive, and shall receive, a return equivalent to that earned on money invested generally in this country, or equal to the prevailing interest rates in the United States. If this government did that, from a humanitarian standpoint, in order to render justice to these patriotic citizens; or if we did that because of an imaginary necessity, in order to make our securities sufficiently attractive that we might get adequate funds with which to run our government—a purpose certainly most laudable, and of the very first importance to the welfare, and happiness, and prosperity, of all industries—if we pursued that policy, first we would be the laughing stock of all nations on the earth; and, second, the ordinary citizens could never get a glance at those bonds, unless by the assistance of the police force to keep the crowd back. Any purchaser who bought those bonds from the original purchaser would have to pay such a price that although the bond paid as high as 7%, he could not make 3½%.

Likewise, the North Western Railroad does not have to pay its unreasonable dividend of 7% to make its stocks attractive. There is no reason why the North Western should be eating up its surplus in that manner. The North Western stock would readily command one hundred cents on the dollar with a 5 or 6% return, like the Pennsylvania, or the New York Central. North Western stock is today selling around 125. But if this company continues to dissipate its resources by stock allotments below the market price, and by the payment of exorbitant dividends, those market prices must go lower. The North Western has given away, since 1903, rights, that are equivalent to stock dividends, aggregating $79 per share. During the same time it has been paying 8% on preferred stock, when 4½% would readily command par, thereby forcing the market prices up to prices ranging from 175 to 190, on their preferred stock. Four to 5% is the prevailing, and usual dividend on preferred stocks in

this country. The investors on the market places of this country have "declared in unequivocal language" that the North Western is paying dividends that are greater by from 50 to 100% than is necessary to make their securities attractive to investors.

While the dividends on the common stocks of the North Western last year were 7%; the prices were so high during that year of depression that you could not buy them on the market and make over 5 1-3% on the investment.

While the dividend on the preferred stocks amounted to 8%, prices were so high that you could not make 4⅝% on your investment. Taking the average interest on all the bonds of the North Western, and the average current market prices on these bonds, the investor could not get these securities at an average price for all of them which would net him over 4½%. (Norton Exhibit 3, page 5.) Not much over one-third of the capitalization of the North Western is common stock; this yielding a return on current quotations of 5 1-3%; the balance of the capitalization earning from 4½ to 4⅝% on current quotations. With practically two-thirds of the capitalization on a 4⅝% basis, or less, and one-third on a 5 1-3% basis, it is apparent that the yield on the market value of the entire plant, based on prices fixed by actual investors as reasonable, last year when prices were depressed, was less than 4.9%. During ordinary years this yield on the entire plant would probably be 4.75% or less.

It is true that the stockholder may count on more return than the annual dividend, such as the undivided surplus, including additions and betterments built and charged to operating expenses, or to surplus. On the other hand, he may consider those surplus earnings as devoted to maintaining the credit of the company, tiding over lean years, building non-productive improvements, such as depots, overhead crossings, etc., and maintaining

the returns to the stockholder, over and above these other factors, at the present level, during lean years as well as fat years.

In determining what is a reasonable rate of return, a perplexing problem involved will be the proper return on the value of expensive terminals belonging to these companies. It will not be necessary at this time to enter upon a discussion of this question. However, we desire to call attention to one precedent from a state supreme court, which is noted in the annals of rate regulation, and which has been cited as an authority as much, if not more, than most of the decisions of the Supreme Court of the United States. In *Steenerson v. Great Northern Ry. Co.*, (69 Minn., 353) the court said:

> "It is not necessary to determine here what rate of annual income on the cost of reproducing these terminals is the lowest which the court would uphold before declaring the rates fixed by the commission confiscatory. But we are of the opinion, that exclusive of taxes, 2½% per annum is a liberal income on such cost, and that is as far as it is necessary to go for the purposes of this case."

The reasonable rate of return in one territory will not apply to another. The same is true of different industries. All business has its hard times. A farm which yields a return of 4% or 5% in good times will not yield 1% above taxes in hard times.

The promoters of these properties reaped their rewards a generation or two ago. And today, the financier who buys a large block of stock of a poor company, re-organizes it, increases its return 1% or 2%, receives his handsome rewards in the market value of his stock, and cashes it in.

The early investors in railway securities reaped extraordinary profits, or lost their investments. Those days have come and gone. An advance in freight rates will rarely, if ever, be of any benefit to the persons who

first put their money into these properties. A number of these railroads passed through receiverships many years ago. Roads, like the Santa Fe and the Union Pacific, have had that experience within the time covered by our exhibits; and today, those are two of the representative prosperous companies in the territory. Those who have reaped these splendid rewards will be the ones who will further profit by an advance granted to them. The Santa Fe and the Union Pacific constitute remarkable and concrete evidence that properties can recover themselves completely without the aid of any general advance in freight rates.

It has been suggested that if you limit the maximum return, you should guarantee a minimum return. That is not a correct statement of the situation. In ordinary business, competition limits the maximum return; but it is very far from guaranteeing any minimum return. In this industry, competition is practically wiped out, and the government is simply taking its place. There is no effort to reduce the maximum below the limit competition has fixed in other industries; and railroading should have no favors not possessed by those in other lines of ordinary business. When hard times come, those who are interested financially in railroads must suffer with the rest of us.

> "When times are prosperous, and capital invested in other lines of enterprise is, as a general rule, bringing good returns, that invested in the railroad business brings good returns also. In times of financial stringency, when other classes of commercial concerns are doing business at a loss, there is no reason why a railroad company must still make good profits. This system of roads earned large dividends when times were prosperous. If times become again prosperous, its prospects for making good profits on the cost of reproducing the system are at least as good as the prospects of business concerns generally." *(Steenerson v. Great Northern Ry. Co.,* 69 Minnesota Reports, pages 353-390.)

When the Commission held the revenue of the Baltimore & Ohio adequate, finding that company to be earning 7½% upon its common stock, the earning upon the total value of the property was 5.21%. Considering the fact that at the present time bonds are selling for 4½%, and they represent ordinarily two-thirds of the railroad value, while stocks of representative companies are selling at the rate of 5% to 6%, the yield on the whole would be less than 5%, consequently the yield of 5.21% on the entire capitalization representative of the whole property must be accepted as very liberal for this class of security.

Of the number of farms embraced in the analysis made by Mr. Wallace, if the farmer was allowed an annual wage of $1,000 for his labor, he would have earned less than 1% upon the value of his farm; if you allow him $600 annually for his labor, he would earn 3.1% on his property. A digest of this testimony, as well as that of the representative from the United States Department of Agriculture, Mr. Thompson, also Mr. Ray and Mr. Danforth, on this subject, is given in the abstract.

The investor in railroad stocks has no responsibility whatever in the management of the property. He puts his money into the investment; and he goes away, leaves it. He comes back a year later, draws his dividend and goes away again. To be sure, it takes ability of the highest class to manage and efficiently direct the financial and business operations of a great railroad system; but the men who do this class of work get princely salaries, exceeding those of the highest positions in the United States Government held by men with the responsibilities of the nation on their shoulders. And those high salaries come out of operating expenses which the public pays. The capacity and intelligence required of the stockholders in any one of these representative western lines of railroads, consists in the ability to cash a check.

When we ascertain the fair value of these properties,

we will then know what companies are reasonably and justly capitalized; then the Prouty test of 1910 will have a sure foundation, in fact.

It does make a difference to the public whether railroads are properly capitalized. It is just as important to the consumers and shippers of the United States that the railroads shall be properly financed as it is that they shall be properly managed and operated. The division of securities into stocks and bonds is an invention of finance, and the public is entitled to share in the results growing out of that invention of finance. The public must not absorb it all; nor must the railroads absorb it all. There must be some give and take, some dividing up of the profits, following every step of progress in all lines of activity; and this is one of them.

The cross examination of Mr. McCrea, president of the Pennsylvania Railroad Co., in 1910, by Commissioner Prouty, is very interesting and suggestive in this discussion. The following argument was had between the late President McCrea and the former distinguished member of this Commission:

> "Commissioner Prouty: Do you say you think your company ought to pay 7% to its stockholders or ought to earn 7% on its stock?
>
> "Mr. McCrea: I think we ought to pay 7%, simply on the ground and exactly the same grounds that I mentioned—that we have for a long time paid 6%, and our stockholders are as a rule small stockholders; they are real investors, and there is a very large number of them—women and children in the states. * * *
>
> "Commissioner Prouty: I was talking with a man up in my state the other day who had $10,000 to invest for a widow whose husband had just died and left that amount of cash. He told me he knew of no place where he could invest that money that would return her over 5%, after the taxes had been paid. Do you know of any investment which would be safe and which would return that woman 5%? I do not

ask you to mention the investment, but the nature of it.

"Mr. McCrea: I think I can only say that when one is investing a widow's funds, you must always aim at a maximum of security of the principal, even if it brings down to rather a minimum the return of it. My sympathies are with your friend up in your state. I can understand how he was in a pretty hard position.

"Commissioner Prouty: I understand you to say the holders of Pennsylvania stock were entitled to 7%, that stock being held by widows and orphans. What are the widows entitled to who are not fortunate enough to own Pennsylvania stock?

"Mr. McCrea: There is no reason why they should not own it. Those widows who own Pennsylvania stock have bought it, not on my advice or the advice of anybody I know, but they have looked over the situation and they have felt it was a good investment. You see, your friend said he could only get, after takink all things into consideration, 5%. The widow and orphan who bought Pennsylvania stock, with the premium on it, I doubt if they are getting on an average, 5% on it.

"Commissioner Prouty: And if you paid a dividend of 10% the widow who bought it on that basis would only get 5%? That being so, if a good security sells on a 5% basis, why should you pay the stockholder in the Pennsylvania road more than 5%?

"Mr. McCrea: I do not think it does. I think there is justice all around. I think if it is just that the employes should receive a consideration in the matter of increase in cost of living, that certainly the investor who makes it possible for him to be in the service has some right to consideration.

"Commissioner Prouty: Do you think the investor in railroad stock is entitled more than the investor in any other security of the same grade, to such a return?

"Mr. McCrea: No, sir, I do not know that I do. It is not a question exactly of the rate. It is a question of what money conditions force on them."

Two classes of people own our railroads—the bondholders and the stockholders. The reasonable rate on that part of the property represented by bonds is conclusively proved by Norton Exhibits 3 and 4 to be approximately 4½% for representative railroads, during ordinary seasons.

With reference to the stocks of the Northwestern group of railroads, we find in the eyes of the investing public that the rate in ordinary seasons approaches close to 5%; while during the present period of depression it has ranged between 5% and 6%. The Burlington pays a dividend of 8%. The last bid on Burlington stock of which public record has been kept in 1914 was 210, the rate approximating 4%. On the Norton Exhibit 3, page 128, these facts are detailed. The Great Western stocks, paying no dividends, sold for 12; but we have no basis to figure the return. The Chicago & North Western, paying a dividend of 7%, sold last year at an average price of 131. The Great Northern, paying 7%, sold at an average of approximately 124. The Minneapolis & St. Louis is a weak sister in the territory, its stock selling at 13. The Minneapolis, St. Paul & Sault Ste. Marie, paying a dividend of 7%, sold last year at an average price of 122. The Chicago, Milwaukee & St. Paul, which has been paying a dividend of 5% for several years, fell slightly below par, selling for 98.2%. This is a reflection of the unfortunate relationship with the Puget Sound. The Northern Pacific, paying a dividend of 7%, sold at 110. The Union Pacific, paying a dividend of 9%, sold at 150.

Considering the period of depression that has been growing through the last few years, culminating in the year 1914, as has been so strikingly exemplified by the witnesses who appeared before this Commission, in all other lines of industry that will be affected by these advances, these prices must constitute a very conclusive

proof that a reasonable rate of return on railroad stocks, during periods of depression, ~~are~~ is probably close to $5\frac{1}{2}\%$; during ordinary years ~~they are~~ it is probably close to 5%. If a given stock is not embarrassed by some intercorporate relationship, or bad management of the directorate of the company—if it is one of these well-established Northwestern lines of railroad, and has been able to pay 5% to 6% over a representative period of years, the market prices of these stocks have ranged at par or above.

Taking all the stocks of our Northwestern group of railroads, weighting them in proportion to the capital stock outstanding, their average price in the year 1914 amounted to 126.5. If you eliminate the Great Northern, Northern Pacific and Union Pacific, the average price was 125.8. This is a remarkable demonstration that the stocks of these companies are worth 100 cents on the dollar in the eyes of the investing public, although it is common knowledge that large portions of them do not and never have ~~have~~ represented bona fide investments in the property. There is not a railroad company in this or any other part of the United States that has paid $6\frac{1}{2}\%$ or 7% dividends to its stockholders, whose stock ordinarily does not sell at more than 100 cents on the dollar. The railroads of this territory are able, easily, to bond their property up to 65% or 70% of their value. If you could secure to these railroad properties a return of 7% on their total values, the stocks will be earning from 10% to 15%, and they will be selling—every one of them—from 150% to 200% of their par value. You will be giving to these railroads more than what the public says is reasonable. The people, who state this, are not interested parties who are trying to keep rates down, or push them up; they are the investors of the nation, at the market places of the world.

PRESENT FAIR VALUE.

In 1903 the Commission objected to Present Value, as interpreted by the Supreme Court up to that time, because of its ambiguity and indefiniteness. In 1905 the Commission quoted from its former decision, but qualified its position, stating that Present Value may be a fair test where the total revenues of a carrier were involved, or a schedule of rates instead of a single rate was under consideration.

The Commission has confirmed that doctrine in the Eastern and Western Advance Rate Cases of 1910, 20 I. C. C., 243, 275; 20 I. C. C., 307; also in the Five Per Cent Case, 31 I. C. C., 351.

The Supreme Court has positively endorsed and thoroughly committed itself by a long line of decisions to Present Fair Value as being the correct basis to adopt in such computations.

Willcox v. Consolidated Gas Co., 212 U. S. 19.
Knoxville Water Case, 212 U. S. 1.
Minnesota Rate Case, 230 U. S. 352, 454.
Smyth v. Ames, 169 U. S. 466.
San Diego and Town Co. v. City of National City, 174 U. S. 739.
Steenerson v. Great Northern Ry. Co., 72 N. W. Rep. 713, 715.
Griffin v. Goldsboro Water Co., 122 N. C. 206, 211, 30 S. E. 319, 320, 41 L. R. A. 240, 242.
San Diego Land & Town Co. v. Jasper, 189 U. S. 439.
Cotting v. Godard, 183 U. S. 79.
Stanislaus Co. v. San Joaquin & R. R. C. & I. Co., 192 U. S. 201.

The true doctrine was announced by the eminent Justice Harlan in the celebrated passage from the case of *Smyth v. Ames:*

> "We hold that the basis of all calculations as to the reasonableness of rates to be charged by a corporation maintaining a highway under legislative sanction must be the fair value of the property being used by it for the convenience of the public." (Ibid. 169 U. S.)

As the Commission well knows, this decision has become one of the most important and firmly established precedents in our system of law relating to the regulations of public service corporations.

In not one decision, down to this date, has the Supreme Court ever retracted from the rule stated in *Smyth v. Ames.* It has been repeatedly adopted and followed as a precedent in state, federal and supreme courts, and by state railroad and public service commissions all over the United States. There is no rule more firmly established than this one in American jurisprudence.

This Commission has frequently recommended to Congress that a valuation of American railroads should be made; and finally Congress has given the authority and facilities to perform that task. Realizing the vast possibilities resulting from the results of your work, American railroads have combined in one concerted effort to comepletely forestall that possibility, to make the national appraisal of American railroads worthless for any purpose, except to see how high rates can go. It would be as if a city had given a council authority to value a gas plant, and just about when the city commences its appraisal, the council should declare that the rates should be advanced.

Are these railway companies earning sufficient revenue? How can you answer the question in the negative until you have some basis to work upon?

The railway companies themselves have chosen to make that the issue in this case. The decisions of the Supreme Court declare what methods you must pursue, and what

facts you must determine, when that issue is fairly presented. These decisions tell you that the fair value of the properties devoted to the public service shall constitute the basis for all your computations.

In this case we have evidence of the present value of large portions of the principal railroads in this territory. These valuations have been made by state commissions, being arrived at by elaborate investigations, covering a long period of years. The methods used in the various states differ somewhat; but, aside from the allowance for so-called "land multiples," it will be found the margin of difference is not so large but what use can be made of them for our purpose; for instance, every state in the group shows that the present capitalization of these railroads exceeds their present value.

We also have valuations made by Mr. Jurgensen, of these same railroads, reduced to a common method, or basis.

So far as this record is concerned, these state valuations constitute the only evidence upon which the Commission can reach its conclusion as to the values of these properties, aside from the testimony of Mr. Jurgensen.

These state valuations were not offered by the State Commissions; they were offered by the chief counsel for the railroads (tr. 13961), Mr. C. C. Wright. They were offered for the purpose of offsetting valuations testified to by Mr. Jurgensen. Those are the two alternative valuations that we have for the railroads of the Northwest. There is one qualification of the foregoing statement. Mr. Felton of the Chicago, Great Western, testified that there had been a valuation made by his company, the Great Western Railroad. In order to test the correctness of that valuation (which we seriously dispute by the other evidence offered), we attempted to find out the methods of arriving at that valuation. Mr. Felton plead ignorance of the subject, but said that later an engineer would be pro-

duced who could be cross-examined. At a subsequent date Mr. Delo was offered as the engineer for the purpose of cross-examination as to the valuation of the Great Western. It quickly developed that this gentleman knew nothing about the valuation, did not know how many men were employed in the work, or how long it took, and could only state that he simply found the notes of the work amongst the files in his office when he was employed by the Great Western, which was after the valuation had been completed. (tr. 4121.)

SUMMARY OF THE VALUATIONS MADE BY STATES OF MINNESOTA AND WISCONSIN.

	Present Value	Capitalization Outstanding in hands of public apportioned on basis of Main Roadway Owned	Book Value
Minnesota (1914)	$277,520,366	$411,772,496	$432,310,019
Wisconsin (1913)	288,179,030	353,934,294	364,997,588
Total	$565,699,396	$765,706,790	$797,307,607

(The foregoing is taken from Jurgensen Exhibits 26 and 9, showing Wisconsin figures, and Jurgensen Exhibits 10 and 27, showing Minnesota figures. In the case of Wisconsin, capitalization and book value are for the year 1914 and the present value for 1913. Investigation shows slight changes. Figures are substantially comparable according to Witness Jurgensen. We have used the Wisconsin present value just as found by the State Commission, including what Mr. Jurgensen says is the multiple on land values. For Minnesota, we have used the present value as found by Mr. Jurgensen, including general expenditures. We have taken the book value for each case as the carriers give it, without allowing for depreciation; and we have only used interstate railways involved in this proceeding.)

The summary we have given above is the actual valuation of twenty-two interstate railroad properties, having a capitalization of over $700,000,000, which has been made by the railroad commissions of these states. The net results show that the capitalization outstanding in the hands of the public exceeds the present value of the railroads in Wisconsin and Minnesota by $200,000,000.

It may be of interest to note that the average present value per mile was found to be $36,751 in Minnesota, according to Mr. Jurgensen's valuation, bringing Morgan's valuation down to date and correcting it in harmony with the states' valuation, if we include general expenditures; and $35,433, excluding general expenditures, under the Commission's classification.

This valuation for Minnesota is that made by the present Chief Engineer for the State Railroad and Warehouse Commission. The valuation for Wisconsin is the one made by the State Railroad Commission of that state. The present value as found by the Wisconsin Commission, including its land values, just as found by the Commission, amounted to $43,219 per mile.

In the Wisconsin valuation, Mr. Jurgensen testified they had included a multiple on land, and gave in evidence a letter to be found in our abstract of the record.

Eliminating that factor it reduced the present value for the Wisconsin railroads approximately $18,500,000, or $2,900 per mile. In the foregoing table we have given the Minnesota figures, including general expenditures, which is contrary to the holding of Mr. Jurgensen. Had we adopted Jurgensen's valuation, excluding the general expenditures, as he testified right and proper, the total valuation for Minnesota would have been reduced by $10,000,000, making a total present value of $267,570,853, or $35,433 per mile of main roadway.

In the above table, it will be further noted that not only the capitalization exceeds the present value of all the

railroads in Wisconsin and Minnesota by $200,000,000, but the book value, or so-called property investment, upon which the railroads are claiming a return in this case, also exceeds the present value of the said railroads in those two states, as found by the state authorities, by over $200,000,000. These figures are the undisputed, uncontradicted record in this case. It is thought that these figures should have a more real significance than offhand opinions of railroad officers, or shippers, as to the actual relations between property investment, capitalization and present values of railroads in this country.

It will be noted that by the Wisconsin valuation, the capitalization exceeds the present value in every instance except two. It will be further noted that the excess capitalization for the Wisconsin railroads amounts to $65,-750,000.

The excess capitalization for Minnesota, we find to be $134,250,000, according to Mr. Jurgensen's valuation.

The two exhibits showing the present value in Wisconsin, excluding the so-called land multiple, and the valuation in Minnesota, omitting the general expenditures, as described in the footnote above, are shown on the following exhibits, being Jurgensen Exhibits 26 and 27.

STATEMENT COMPARING WISCONSIN VALUATION OF JUNE 30, 1913, OMITTING MULTIPLE ON LAND VALUE, WITH CAPITALIZATION AND JURGENSON'S VALUATION OF JUNE 30, 1914.

Name of Railway	* Capital Stock & Funded Debt held by public basis of main line owned	Wisconsin present value as of June 30, 1913	** Jurgensen's present value as of June 30, 1914, omitting III General Expenditures
Chicago, Burlington & Quincy	$ 7,364,533.00	$ 14,635,677.00	$ 13,384,142.00
Chicago, Milwaukee & St. Paul	105,227,911.00	76,539,390.00	63,709,628.00
Chicago & North Western.	98,364,415.00	93,305,672.00	80,929,891.00
Omaha	32,092,546.00	28,265,149.00	25,481,140.00
Duluth, South Shore & Atlantic	7,754,094.00	2,030,892.00	2,089,270.00
Great Northern	2,140,028.00	8,285,839.00	7,287,438.00
Illinois Central	11,824,721.00	2,546,553.00	2,254,543.00
Northern Pacific	9,391,788.00	4,438,981.00	3,778,347.00
Minn., St. Paul & Sault Ste. Marie	17,362,712.00	12,943,779.00	11,956,539.00
Wisconsin Central	62,411,546.00	26,682,108.00	23,011,719.00
Total	$353,934,294.00	$269,673,040.00	$233,882,657.00
Capitalization in excess of Valuation		$ 84,261,254.00	$120,051,637.00
Per Mile of Main Roadway (6,685.06)	$ 52,944.00	40,339.00	34,985.00
Capitalization in excess of Valuation		12,605.00	17,959.00

*Figures taken from Column 7 of Jurgensen Exhibit 23.
**Figures taken from Column 26 of Jurgensen Exhibit 23.

STATEMENT SHOWING CAPITALIZATION AND VALUATION IN THE STATE OF MINNESOTA AS OF JUNE 30, 1914. TAKEN FROM JURGENSEN EXHIBIT NO. 10.

Name of Railway	* Capital Stock & Funded Debt held by public basis of main line owned	** present value as Jurgensen's of June 30, 1914, omitting III Gen'l Expenditures
C., B. & Q..................	$ 762,860	$ 2,147,116
C., Gt. West................	32,551,598	11,982,472
C., M. & St. P..............	72,012,884	43,674,832
C. & N. W...................	29,800,774	14,969,594
C., R. I. & P...............	13,583,182	6,417,916
C., St. P., M. & O..........	17,868,377	18,213,297
D. & Sioux City (I. C. lessees)	1,137,529	537,719
Gt. Nor.	116,516,878	76,104,025
M. & St. L..................	17,630,333	10,002,627
M., St. P. & S. Ste. M.......	41,291,051	31,572,811
Nor. Pac.	66,873,009	49,917,530
Wisc. Cent.	1,744,021	2,030,914
Total	$411,772,496	$267,570,853
Capitalization in excess of Valuation		$144,201,643
Per Mile of main roadway (7,551.26)	$ 54,530	35,433
Capitalization in excess of Valuation		19,097

*Figures taken from Column 7, Jurgensen Exhibit 10.
**Figures taken from Column 26, Jurgensen Exhibit 10.

In addition to the foregoing we have of record the valuations found by Nebraska and South Dakota. The present value of Nebraska railroads amounts to $245,877,934, or an average of $40,093 per mile for that state.

This exhibit was introduced by Mr. C. C. Wright, general counsel for the railroads in this proceeding.

The present value per mile of line, as found by the Nebraska Commission, according to the evidence introduced by Mr. Wright for the different interstate railroads in this case were as follows:

(Nebraska) Name of Railway	Present Value Per Mile of Line As of June 30, 1911
Chicago, Burlington & Quincy	$36,348
Chicago & North Western	28,849
Chicago, Rock Island & Pacific	33,697
Chicago, St. Paul, Mpls. & Omaha	27,065
Missouri Pacific	25,928
St. Jos. & Gd. Island	19,636
Union Pacific	70,525

In South Dakota, the present value of all the railroads, as found by the South Dakota railroad appraisal as of 1910, amounts to $84,999,424, making an average value per mile of line $23,345 in that state of interstate railroads involved in this proceeding. The values per mile of line of each of these railroads in South Dakota, as shown by the exhibit, amounted to:

(South Dakota) Name of Railway	Present Value Per Mile of Line As of June 30, 1909-10
Chicago, Burlington & Quincy	$49,819
Chicago, Milwaukee & St. Paul	*21,438
Chicago & North Western	24,019
Chicago, Rock Island & Pacific	20,761
Chicago, St. Paul, Mpls. & Omaha	25,964
Dub. & Sioux City (Ill. Cent.)	40,195
Great Northern	20,465
Minneapolis & St. Louis	19,592
"Soo" Line	13,452
South Dakota Central	13,260

*Includes Chicago, Milwaukee & Puget Sound Ry.

The valuation in the state of South Dakota by the South Dakota Commission, was not introduced by that commission, nor by the state commissions in this case. As previously stated, the foregoing values were introduced by Mr. C. C. Wright on behalf of the railroads. These constitute the undisputed, uncontradicted record in this case, except as it has been stated by Mr. Jurgensen that the values are too high as stated, and for the reasons he gave while on the witness stand.

In addition to the above, Mr. Jurgensen made a very elaborate analysis of the present value of the railroads in Michigan, Wisconsin, South Dakota and Nebraska, reducing them to a common basis, which Mr. Jurgensen held is right. We will not undertake to discuss this work. It will be covered by a separate brief prepared by the State Railroad and Warehouse Commission and the Assistant Attorney General of Minnesota.

In this compilation, Mr. Jurgensen has used the basic figures compiled by the various states, combining them on a uniform basis. One of these valuations by state commissions was made in 1900; the one in Michigan. We are not especially concerned with Michigan values, for they affect our Western railroads very slightly.

Mr. Jurgensen endeavored to bring the various state valuations down to date as far as possible. There were some criticisms of his work which will not have any large or substantial effect on the final results. Suffice it to say that Mr. Jurgensen's valuation of twenty-five railroads serving these five states, shows a total present value, including general expenditures, of $937,000,000, or $32,330 per mile. The present value, excluding general expenditures, amounts to $900,000,000, or an average of $31,082 per mile.

The capital stock and funded debt of these railroads apportioned on basis of main roadway owned, outstanding in the hands of the public and not held by the railway company, amount to $1,459,000,000; and the property investment, or book value, of the road and equipment of these same companies, as shown on their books, aggregates $1,489,000,000.

It will be noted that there is only about a two per cent variation between the so-called property investment, or book value, and capitalization outstanding; further, that the book cost exceeds the capitalization.

The capitalization and book cost of these properties exceed the present value, as found by Mr. Jurgensen, by more than $500,000,000, whether you include, or exclude, the three general expenditures.

It has been suggested by counsel for the carriers that these state values are not comparable to present values in those particular states, because of the increase in land values. It is doubtful whether an increase in land values

will justify an advance in rates. It may justify increasing revenues by other methods. This thought was very forcibly stated by the Commission in its Western Advance Rate Case of 1910. We will not repeat. The same thought was suggested, but no final conclusion adopted by Mr. Commissioner Harlan in the decision in *Texas Railroad Commission v. Atchison, Topeka & Santa Fe*, 20 I. C. C. 463.

However that may be, whether the railroad is entitled to the unearned increment, or not, as a justification for an advance in freight rates, the valuation as of 1913 in Wisconsin, and the valuation brought down to date by the Chief Engineer in Minnesota, constitutes quite conclusive evidence as to the relation between capital and value, on a representative group of the strongest roads in the Northwest, that have been notoriously improving and building up their properties in recent years. This objection as to increased land values does not have force as to these computations, because they are of recent date.

Mr. Jurgensen is the chief engineer for the Minnesota Railroad & Warehouse Commission. He was the assistant engineer at the time of the trial of the Minnesota Rate Case, at which time Mr. Morgan was the chief engineer. Mr. Morgan, in making the valuation of Minnesota railroads, in which he included the severance damages occasioned by the purchase of land for railroad purposes, allowed this item, not only for land actually purchased where such expenditures were actually made, but he created out of his fertile imagination, a multiple which he applied to all the land the railroads owned, whether bought for a nominal sum, or given to the railroads, or acquired, through condemnation; thereby, not only giving the railroad valuation, including the present value of its property, but also including all expenses incurred by the companies in addition to that present value, and also a fictitious expense that is not a part of the present value

and is not a part of any expenditures the companies have ever incurred in their history. The allowance for fictitious severance damages of that character, was repudiated by the State Railroad & Warehouse Commission of Minnesota; although Mr. Morgan was their leading witness on value. Later the gentleman resigned from his position with the Minnesota Commission to become a railway official, and Mr. Jurgensen became his successor.

The Supreme Court of the United States also repudiated the position taken by Mr. Morgan and by the railroads. There were various other important modifications of the Morgan valuation.

Mr. Jurgensen has had many years' experience as a civil engineer; he was employed by the County Surveyor of Hennepin County of Minnesota two years, assistant engineer for the city of Minneapolis for one year, assistant engineer of the Minneapolis & St. Louis Railroad one summer, employed in engineering department of the Minneapolis, St. Paul, Sault Ste. Marie Railway Company one summer, employed in the engineering department of the Chicago, Great Western Railroad for eight years, and has been in the employ of the Railroad & Warehouse Commission of Minnesota for eleven years. (tr. 5058, 5059.)

In Mr. Jurgensen's consolidated valuations, he has been able to cover a very substantial portion of the mileage of several of the railroads. That is of much more significance than a small per cent of the mileage valued, because that might not be representative at all of the railroad as a whole. For instance, on the Illinois Central he only had 4% of the mileage covered by the valuation. Mr. Wright called attention, on cross-examination, to some comparisons between so-called preciated present cost, as found by Mr. Jurgensen, and the depreciated present cost. While on the stand at a later date, the witness testified that his use of the expression "preciated present cost" was practically synonymous with the expression "repro-

duction new,'' while the ''depreciated present cost'' was practically synonymous with the term ''present value.'' An examination of Mr. Jurgensen's exhibit No. 13 will disclose the fact that in almost every instance where the present values were secured for 50 80% or more of the mileage of any property, the capitalization and the book value of the said properties was largely in excess of the present value.

The foregoing valuations, which we have been discussing, are the only ones that are a part of the record in this case.

Mr. Wright, counsel for the railroads, offered the state valuations and used Mr. Jurgensen as his witness. Both sets of valuations prove substantially the same thing. Serious objection was made because of Mr. Jurgensen's appraisals of land. In that connection, however, it will be noted that the dates of the valuations made by the states are as follows: Wisconsin, 1913; Nebraska, 1911; South Dakota, 1910 (or 1909), and Minnesota, made by Jurgensen, 1914. Whatever may be the conclusion as to Michigan, it can be fairly stated that there has been no substantial advance in land values since 1910, 1911 and 1913. In these states, it is probable that land has declined recently, as testified to by the witness. This would offset, to a very substantial extent, any increase occurring in 1911 or 1912.

Apportioning capitalization upon the mileage basis tends to spread the capitalization out equally over the system; and their valuation by state boundaries concentrates the value of terminals in the said states. This must be borne in mind in considering the significance of any total as of the amount above. It will be noted, however, that large terminals of many of these railroads are located in Nebraska, Minnesota and Wisconsin. Therefore, taken as a whole, the comparison may be considered fair. In those instances where there is a very short mileage of

main line that is valued, or large terminals are included, the values would exceed the average for the system.

In the two states of Minnesota and Wisconsin we have very large terminals. The largest terminals on the systems of the Great Northern and Northern Pacific, are located in the State of Minnesota. In the Minnesota case it was found that 75% of the land values in Minnesota belonging to one of its principal railroads was located in three cities, Duluth, St. Paul and Minneapolis. Those large terminals are included in the present valuations given above.

Probably the most significant figures to be remembered in the foregoing summary are, first, that present value per mile of line, as found by Mr. Jurgensen for all of the interstate railroads in these four states, having a present value of $900,000,000, averages per mile of line $31,000.

Second. That the present value of all the interstate railroads involved in this proceeding, in the state of Minnesota, as found by the Chief Engineer in the employ of the State Railroad & Warehouse Commission, amounted to an average of $35,433 per mile.

Third. That the present value of all the interstate railroads involved in this proceeding in the state of Wisconsin, as found by the State Railroad Commission of that Commonwealth, as of June 30, 1913, and including the so-called land multiple, averaged $43,219 per mile, and excluding the so-called land multiple, averaged $40,339 per mile; and the capitalization in the said state exceeded the present value.

The railroads are industriously trying to spread the sentiment throughout the United States that the outstanding capitalization of American railroads is no greater than the present valuation of their properties. That may prove to be correct; it will depend upon the methods adopted in making that valuation. So far as the western railroads are concerned, the fallacy of any such con-

clusion is conclusively demonstrated by the foregoing facts which we have outlined.

If we adopt the valuations per mile of line found by Mr. Jurgensen for the interstate railroads involved in this proceeding, we secure the following returns per mile, as indicated, in 1914:

FOR YEAR ENDED JUNE 30, 1914.

Railroad Co.	Net Operating Income Per Mile	Return on basis Jurgensen's per mile valuation as of June 30, 1914			
		All Stock %	Two-thirds Bonds %	One-third Stock %	Jurgensen's Valuation Per Mile; Present Cost Depreciated including General Expenditures
C., B. & Q.	$2,796.00	8.0	4.18	15.5	$35,142.00
C. & N. W.	2,346.00	7.7	4.30	14.5	30,483.00
C., M. & St. P.	2,738.00	8.6	3.98	17.8	31,844.00
C., St. P., M. & O.	2,300.64	6.70	5.3	9.5	34,348.06
Great Northern	3,134.88	8.32	4.3	16.4	37,657.69
Northern Pac.	3,945.05	8.43	3.7	17.9	46,784.76
Union Pac.	5,261.07	9.17	4.1	19.3	57,357.06
M., St. P. & S. S. M.	1,387.94	4.66	*4.0	6.0	29,804.67
M. & St. L.	1,018.75	3.32	4.3	2.3	30,661.39
C. G. W.	1,260.41	4.03	4.0	4.1	31,270.07

*Actual rate not available—assumed this figure as being about the average for roads in this territory.

Adopting the average value for each railroad, as determined by the state valuations, which have been made, we find the following:

FOR YEAR ENDED JUNE 30, 1914.

Railroad Co.	Net Operating Income Per Mile	Return on Basis Present Value** as found by States (Per Mile)			
		All Stock %	Two-thirds Bonds %	One-third Stock %	Present Value Per Mile 1st Main Track Owned
C., B. & Q..........	$2,796.00	7.1	4.18	12.9	$39,466.00
C. & N. W.........	2,346.00	6.7	4.30	11.4	35,171.00
C., M. & St. P......	2,738.00	7.7	3.98	15.2	35,432.00
C., St. P., M. & O...	2,301.00	6.28	5.3	8.2	36,643.00
Great Northern	3,135.00	8.17	4.3	15.9	38,375.00
Northern Pac.	3,945.00	8.28	3.7	17.4	47,669.00
Union Pac.	5,261.00	7.46	4.1	14.2	70,525.00
M., St. P. & S. S. M.	1,388.00	4.36	*4.0	5.1	31,825.00
M. & St. L.........	1,019.00	4.18	4.3	3.9	24,388.00
C. G. W............	1,260.00	4.03	4.0	4.1	31,270.00

**Present value here used is taken from original valuations of the railroads named herewith in the states of South Dakota, Nebraska, Minnesota and Wisconsin for the years when the valuations were made.

*Actual rate not available—assumed this figure as being about the average for roads in this territory.

In connection with this, attention is called to the fact that 89% of the traffic handled by the Northwestern group of railroads is handled by the C., B. & Q., C. & N. W., C., M. & St. P., C., St. P., M. & O., Great Nor., Nor. Pac. and Union Pac. If you exclude the last three from the Northwestern group, then 83% of the traffic of the balance of the railroads is handled by the C., B. & Q., C. & N. W., C., M. & St. P. and C., St. P., M. & O.

RECAPITULATION.

The level of freight rates on the western railroads involved in this proceeding are already from 20% to 60% higher than those on the railroads in Official Classification Territory, Central Freight Association Territory, or Southern Classification Territory.

This Commission should find that the credit of western railroads, as a whole, is as good or better than that of companies engaged in any other line of business in the United States. The result of such a finding as that will simply add strength and stability to these securities, and will be of much more intrinsic worth to the companies involved than an order finding these railroads in bad financial condition.

It has not been necessary for us to parade glaring, sensational incidents of high finance or questionable acts. It is a business proposition. The present movement for increased freight and passenger rates involves a large sum of money; not just at one time, but every year, now and in the future, for this and future generations to pay.

The impression has been given that railroads have not been able to maintain their properties during recent years; that they have been compelled to retrench so severely that the public has been injured, as well as the railroad properties. This is true as to some railroads; but this record shows that it is absolutely untrue as to western railroads, as a whole, and this Commission should so find.

As in all business, there are temporary periods of depression when the railroads as a whole, including both the

strong and the weak lines, are compelled to retrench in their expenses for a time. It has been conclusively proven that these western carriers expended in 1914 in maintaining their properties, $2,800 per mile, which was greater than in any other year in their history except one, 1913.

It has been proven that the railroads in Western Territory, as a whole, have actually expended in maintaining their properties, during the past five years, an average of $50,000,000 a year more than for any preceding five-year period since the first railroad was built in this Territory. Every railroad witness who took the stand admitted, on cross examination, that they were maintaining their properties at a higher standard during recent years than ever before.

Certain financial journals have been saying: "Give the railroads an increase in freight rates and they will help everybody in this period of depression." We wonder if it ever occurred to them that the simpler way to help these people would be to let them keep their money, instead of taking it away from them. The method suggested by these organs of the money centers, savors strongly of notorious monarchial methods of the past. The king needed the money more than the people did, so he thought; therefore, he took it. There is a good strong sentence that has been coming down the centuries, and will go on for future generations to consider; it reads like this: "Render therefore unto Caesar the things which be Caesar's."

The railroads are entitled to a reasonable return. Less than that is unjust to the railroads. More than that is unjust to the public.

During the year 1914, as all people know, there was a world-wide business depression. In the United States the grain crops of the preceding fall (being in the fiscal year 1914) fell off 900,000,000 bushels.

In the exhibits offered, it is shown that in 1913 the net revenues of the railroads in Western Territory as a whole, above all operating expenses, amounted to $420,-000,000, being the largest, with only one exception—1910—since the first track was laid west of the Mississippi River.

The average net revenue of these railroads, during the past five years averaged $400,000,000 per year. This was greater than during any five-year period, prior to 1913, in their whole history.

This record shows that the percentage return of net corporate income on capital stock outstanding in 1913, was more than double what it was sixteen years ago, and five times greater than it was twenty-five years ago.

On the first day of these hearings, we announced that we expected to prove these railroads have been building many additions and betterments, which they were charging to operating expenses. In other words, after paying a return on their investment, we have been building their properties for them, and then are asked to pay a return, not only on their investment, but also on our investment—on what we build for them. This is fundamentally unsound, and unjust.

At that time, we did not realize how easily those facts would be proved. These claims were substantiated by the testimony of the railroad officials, themselves, before it became time for us to offer our evidence.

President Felton, of the Great Western, frankly admitted on direct evidence, that practically one-half the cost of additions and betterments could be charged to operating expenses, and that very large sums were so charged during the past four years. President Bush, of the Missouri Pacific, admitted that large portions of the cost of rebuilding his road during recent years had been paid out of operating revenues, and charged to expenses.

Mr. Wettling, a witness for all the railroads, made a similar admission, but was unable to state how much of that had been so charged.

This testimony was supplemented by the evidence of Mr. Chambers, a witness on behalf of the State Commissions, who, from a personal examination of the books of the carriers, demonstrated that over $13,000,000 had been expended in raising the standard of the property of one company. This witness did not take into account large sums expended for labor in connection with additions and betterments, which can be charged to operating expenses; he did not take into account rails, ties, ballast, tunnels and maintenance of roadway and track, all of which would have added large sums to the amount he demonstrated had been expended in the manner described. The magnitude of the total sums involved may be grasped when it is noted that Mr. Wettling's exhibit shows that over $700,000,000 have been expended in additions and betterments by these western railroads during the past seven years. It is safe to say that the cost of additions and betterments, amounting to several hundred million dollars, has been charged to operating expenses by these western railroads during recent years. So long as this practice is permitted to continue, it is going to be exceedingly difficult to determine just what are the net earnings of our railroads.

When prosperity is at its very highest, the railroads can show the lowest net earnings, by simply building a larger amount of improvements and extensions, and charging large portions of this to operating expenses, thereby automatically reducing their net income. We have been passing through a period of new construction of that character, for which proper allowance must be made.

We are perfectly willing to pay the people these gentlemen represent, an adequate return for their invest-

ment, such adequate return to include a reasonable surplus for tiding them over lean years; but we are absolutely unwilling to build their properties for them and then pay a return on what we build. There is no justice in that. The American people will not permanently submit to any arbitrary action which works a substantial wrong on the public.

The use of the so-called property investment, which is simply a book value, and which includes the value of that kind of property, built out of surplus, as a justification for an advance in freight rates, is fundamentally wrong. Such a policy has been condemned, in the past, by two unanimous decisions of this Commission. Such a policy has been repudiated by some of the leading railroad officials of the country, while on the witness stand under oath, before this tribunal.

If there were any emergency or crisis in the railroad business, it might demand a temporary advance in rates until the Commission has completed its appraisal of American railroads. These western railroads have not even attempted to claim any emergency or crisis in their business, as did the eastern carriers. They acted wisely and fairly in this, for there is no such emergency. They have been steadily improving financially, and physically, during recent years.

The attractiveness of stock is purely a relative matter. There is no answer to the argument that the larger surplus, or the larger dividend, will make a more attractive stock; and, in turn, there is no limit to that argument. The practical question comes in here: Are these securities attractive, compared with those of companies in other pursuits? What does the ordinary business yield? These are the important questions. If you find, in fact, that these railroad companies have been able to maintain their properties as they ought to be maintained, and that railway credit, and railway securities, are as sound and at-

tractive as those of other public service and industrial companies, then there is no reason for still larger returns in the shape of dividends or surplus.

Attention has been called to the fact that 4% bonds can no longer be marketed at par, as they were years ago. It comes with poor grace to charge the public 6%, and then complain because you cannot get your money at 4%. An advance in freight rates will not make 4% bonds sell at par.

Professor Roscoe Pound, of Harvard, tells the following instance, that is applicable to this argument: A sarcastic conveyancer, during the fever for legislative reform in England, proposed this law: "Be it enacted that during the month of April of each year the King's loyal subjects shall be at liberty to, and are hereby enabled to go forth without umbrellas upon any and all public streets, roads and highways, without getting wet."

Whether rates are advanced or not, whether the Commission or Congress attempts to legislate that prices on bonds shall not decline, will have no more practical effect on the bond prices than the law proposed by the English conveyancer would have had on the weather conditions during the month of April. The market prices on 4 or 4½% bonds are not peculiar to the railroad industry. The general financial situation and extraordinary production of gold, are the controlling factors in that situation, and this Commission, as we said in 1910, cannot affect that situation.

There is nothing to indicate that railway credit, or railway profits, differ materially from the financial situation of other industries generally, except that the condition of these railroads, as a whole, has been proved to be superior. There are ups and downs in all business. The railroads must take the bitter, with the sweet. We find the general trend of their net revenues and of their credit, over a series of years, to be distinctly upward.

There has been a marvelous development and growth in the property, and revenue, of Western railroads during the past five years, surpassing all prior years, and surpassing all other countries.

More than one-third of the railroad mileage of the world has been constructed by American railway companies with private capital. Certainly these securities must be attractive to investors.

The Northwestern group of railroads has increased its property investment, during the past five years, more than $700,000,000. The Northwestern and Southwestern groups of railroads, named in the Commission's suspension order in this case, have, together, increased their property during the past five years more than one billion dollars.

The Western railroads as a whole are able to pay their operating expenses including taxes, and to properly maintain their properties. There is no claim of any need for money for those purposes. These carriers are not asking for more money to meet the interest on their outstanding indebtedness. While a few have failed, the same is true in all lines of industry. As a whole, they are able to meet their obligations. While there is a slight advance in interest charges on new money over fifteen years ago, old bonds have been, and are being, retired; so that the average interest payment on all outstanding indebtedness is less today, than in former years.

The carriers are not demanding more money for the purpose of paying dividends. While the average interest rate has declined, the average dividend rate has increased. The dividends paid by these Western railroads last year amounted to $140,967,725. The rate of dividends paid by the Western railroads, including both the Northwestern and Southwestern groups, last year, was 73% greater than in 1900, and 121% greater than in 1890. The average

dividend rate during recent years has been greater than ever before in the history of these companies.

The total annual cash return to the owners of these railroads, in interest and dividends, during the past five years, has been in amount, and in rate, greater than during any other five-year period in their history, as far back as official records are available.

The carriers ask for more money that they may have a surplus with which they can build additions and improvements, needed and demanded by the public.

The total accumulated surplus earnings of those Western railroads named in the suspension order of the Commission, on the 30th day of June last year, amounted to $457,800,000, a part of which was in property that has been acquired, and is in railroad service; but that is not true of all of it, for they had cash on hand and investments in outside securities. They paid dividends last year, amounting to $140,900,000. They had cash on hand amounting to $125,000,000. The book value of securities held in their treasuries, laid aside for future use, and unpledged, aggregated $190,000,000.

We submit that the legitimate requirements of a surplus are here provided for. If they desire to build permanent revenue producing improvements, they must do it with their own money; they must not expect us to do it for them.

It has been proved that the depression in the past year was not due to freight or passenger rates, and was not peculiar to the railroad industry, but applied to business generally throughout the world.

It has been proven, incontestably, that the credit of these western railway companies is better than that of representative companies in any other line of business in the United States.

It has been proven, incontestably, that these companies

have been able to maintain their properties, during recent years, at a higher standard than ever before in their history; and they have also set aside large sums of money out of earnings, for betterments, improvements and outside investments.

Tersely stated, the issues in this case center around the one question: Who shall pay for additions and betterments to railroad property? The public interests demand better service, safer transportation, and improved facilities; but it also demands that the railroads themselves shall build these improvements, and the public will then pay a reasonable return on their value. We want these betterments; but justice demands that we shall not pay for their construction, and then pay an annual return to the railroads on what we build.

We here adopt the language of a tribunal that ranks high in the American scheme of government:

> These roads need more money, it is said, but they fail to show that their credit is not good, that they have been unable to secure money at current rates, or that they cannot make needed improvements and extensions because of a lack of faith in their solvency and the stability of their securities. To increase the rate of addition to surplus for the reasons which the carriers have advanced would seem to be a work of supererogation.

Respectfully submitted,

MINNESOTA RAILROAD & WAREHOUSE COMMISSION,
By IRA B. MILLS,
CHAS. E. ELMQUIST,
O. P. B. JACOBSON,
Commissioners.
A. J. EDGERTON,
Assistant Attorney-General.

NEBRASKA STATE RAILWAY COMMISSION,
By H. T. CLARKE, JR.,
THOMAS L. HALL,
H. G. TAYLOR,
Commissioners.
WILLIS E. REED,
Attorney-General.

KANSAS PUBLIC UTILITIES COMMISSION,
By JOSEPH L. BRISTOW,
C. F. FOLEY,
JOHN M. KINKEL,
Commissioners.
A. E. HELM,
Commerce Counsel.

SOUTH DAKOTA RAILROAD COMMISSIONERS,
By J. J. MURPHY,
P. W. DOUGHERTY,
W. G. SMITH,
Commissioners.
OLIVER E. SWEET,
Counsel.

NORTH DAKOTA BOARD OF RAILROAD COMMISSIONERS
By W. H. STUTSMAN,
O. P. N. ANDERSON,
W. H. MANN,
Commissioners.

IOWA BOARD OF RAILROAD COMMISSIONERS,
By CLIFFORD THORNE,
J. H. WILSON
JNO. A. GUIHER,
Commissioners.
J. H. HENDERSON,
Commerce Counsel.

OKLAHOMA CORPORATION COMMISSION,
By J. E. LOVE,
GEO. A. HENSHAW,
W. D. HUMPHREY,
Commissioners.

RAILROAD COMMISSION OF LOUISIANA,
By SHELBY TAYLOR,
B. A. BRIDGES,
JOHN T. MICHEL,
Commissioners.
W. M. BARROW,
Assistant Attorney-General.

ARIZONA CORPORATION COMMISSION,
By F. A. JONES,
W. P. GEARY,
A. W. COLE,
Commissioners.

RAILROAD COMMISSION OF ARKANSAS,
By J. SAM ROWLAND,
WM. F. McKNIGHT,
THOS. E. WOOD,
Commissioners.

PUBLIC UTILITIES COMMISSION,
OF THE STATE OF COLORADO,
By S. S. KENDALL,
GEO. T. BRADLEY,
M. H. AYLESWORTH,
Commissioners.

PUBLIC UTILITIES COMMISSION OF IDAHO,
By A. P. RAMSTEDT,
JOHN W. GRAHAM,
A. L. FREEHAFER,
Commissioners.

RAILROAD COMMISSION OF MONTANA,
By J. H. HALL,
E. A. MORLEY,
J. E. McCORMICK,
Commissioners.

RAILROAD COMMISSION OF NEVADA,
By H. F. BARTINE,
J. F. SHAUGHNESSY,
W. H. SIMMONS,
Commissioners.

STATE CORPORATION COMMISSION OF NEW MEXICO,
By MATTHEW S. GROVES,
HUGH H. WILLIAMS,
OSCAR L. OWEN,
Commissioners.

TRAFFIC SERVICE BUREAU OF UTAH,
By ROSS W. BEASON.
Commissioner.

Dated at Des Moines, Iowa, June 9, 1915.